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REPORT ON FINE GRID SAMPLING PLAN (FOR TCDD AND 2, 3, 7, 8-TCDD) Volume One

Hercules Incorporated
Wilmington, Delaware

IT Corporation
Knoxville, Tennessee

RESPONSIVE TO THE NEEDS OF ENVIRONMENTAL MANAGEMENT

REPORT ON FINE GRID SAMPLING PLAN

(FOR TCDD AND 2,3,7,8-TCDD)

JACKSONVILLE, ARKANSAS

Submitted to:

HERCULES INCORPORATED
Wilmington, Delaware

Prepared by:

IT CORPORATION
Knoxville, Tennessee

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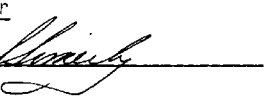
JACKSONVILLE, ARKANSAS

IT ANALYTICAL SERVICES APPROVALS:

NAME: Dana S. Simerly

TITLE: Project Manager

SIGNATURE: 

NAME: Carol A. Erikson

TITLE: Program Manager

SIGNATURE: 

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1.0

1.0 INTRODUCTION AND SUMMARY

In order to comply with the soil and sediment sampling and analytical provisions of an Administrative Order on Consent (Order) between itself and the U.S. Environmental Protection Agency, Region VI, Hercules Incorporated contracted with IT Corporation, a wholly-owned subsidiary of International Technology Corporation, to collect soil and sediment samples in the Vertac off-site areas of Jacksonville, Arkansas and with TMS Analytical Services, Inc. to conduct analyses of the collected samples. The purpose of this sampling and analytical project was to determine the concentrations of tetrachlorodibenzo-p-dioxin (TCDD; dioxin) if any, in soil and sediment in the Vertac offsite areas. The results of this soil and sediment sampling and analytical effort are reported in this document.

Results of analyses of fish from Lake Dupree for 2,3,7,8-TCDD are reported in a separate document as required by the Order.

Results of analyses of sediment samples collected from the basin and ponds of the old sewage treatment plant (STP) for non-dioxin analyses, which were not part of the Order, are also reported in a separate document.

In the past, the Vertac plant in Jacksonville manufactured and/or formulated pesticides, including phenoxy herbicides. These products, manufacturing by-products and waste products are suspected of having contaminated Rocky Branch Creek, which flows through and forms portions of the east and west boundaries of the plant, the City of Jacksonville's old sewage treatment plant (STP; West Wastewater Treatment Plant) and parts of its sewage collection system, Lake Dupree, and Bayou Meto which receives water from Rocky Branch Creek. Past sampling by various organizations had detected dioxin contamination in these areas.

As both Rocky Branch Creek and Bayou Meto are known to flood during periods of heavy rain, the present sampling effort was designed to obtain information about areas located in the flood plains of both bodies of water. Locations selected for sampling were west and east legs of Rocky Branch Creek, residential and non-residential land immediately adjacent to and within the legs of the creek,

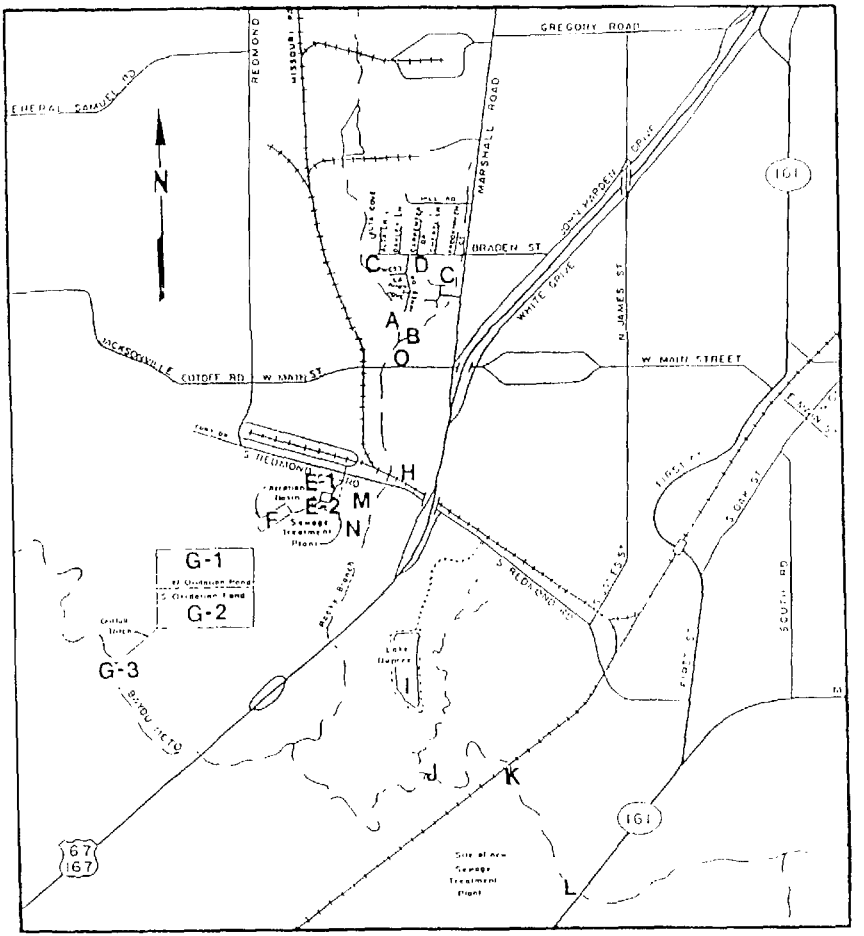
south of the Vertac plant, and Bayou Meto. Areas within and contiguous to the old sewage treatment plant and surface areas in the residential area immediately adjacent to manholes which are part of the sewage collection system were also included in the sampling plan. Lake Dupree and several other miscellaneous areas were also examined during this project. An overview of the areas in Jacksonville included in this sampling/analytical effort are shown in Figure 1.

During this project several sample collection techniques were used depending upon the area being sampled. In many of the areas, several individual aliquots of soil or sediment were composited to form one sample for analysis. A composite sample was formed with aliquots taken from sections (grids) with a maximum size of 5000 square feet. In other areas a single sample (grab sample) was collected and submitted for analysis. When concentrations of TCDD of 1 ppb (parts per billion) or greater were found in a sample from any section, samples taken from an immediately adjacent section were analyzed. If these samples contained concentrations of TCDD of 1 ppb or greater then sampling was performed in the next immediately adjacent section until a non-contaminated section was reached. This sequential sampling and analysis was done to delineate the extent of contamination.

During the field sample collection portion of this project, over 450 soil or sediment samples, either composite or grab samples were collected. Of these, over 300 samples were submitted for analysis for TCDD by semi-isomer specific procedures. When analytical results showed that the TCDD concentration in a sample was equal to or greater than 1 ppb, that sample was also analyzed for the specific 2,3,7,8-TCDD isomer.

Most soil or sediment samples from the areas involved in the sampling program had TCDD concentrations less than 1 ppb; over half the soil and sediment samples analyzed had TCDD concentrations less than 0.300 ppb.

One of the areas where TCDD concentrations of 1 ppb or greater were found was in the top sludge of a section of the aeration basin (Figure 1, Area F) and the sludge drying beds of the STP (Figure 1, Area E1); the highest concentration of 2,3,7,8-TCDD found was 2.8 ppb. Other soil and sediment samples from locations within the STP (Figure 1, Areas G1/G2) and in the Bayou Meto at the outfall of



AREA DESCRIPTIONS

A = W ROCKY BRANCH (BANK ELEVATIONS)
B = E. ROCKY BRANCH (BANK ELEVATIONS)
C = ROCKY BRANCH (FINE GRID ALONG BANK)
D = RESIDENTIAL AREA (GROSS GRID)
E = OLD SEWAGE TREATMENT PLANT (STP)
F = AERATION BASIN AT STP
G = OXIDATION PONDS AT STP & BAYOU METO AT OUTFALL OF OXIDATION PONDS
H = MANHOLE # 2043 BY SOUTH REDMOND RD
I = LAKE DUPREE
J, K, L = BAYOU METO (BANK ELEVATIONS)
M, N = DRY CREEK BEDS
O = MOUND AT ROCKY BRANCH & WEST MAIN STREET

FIGURE 1
SAMPLING AREA OVERVIEW

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the STP (Figure 1, Area G3) contained less than 0.300 ppb of TCDD. Soil from two dry creek beds located between the eastern side of the STP and Rocky Branch Creek (Figure 1, Areas M and N) also contained less than 0.300 ppb TCDD.

Soil from some locations of Area C (Figure 1) adjacent to the west leg of Rocky Branch Creek were found to have concentrations of TCDD ranging from 1 to 3 ppb. These locations along the west leg were the yards of three residences (2202 and 2203 Braden Street and 2112 West Lane) and portions of a wooded area south of this residential area. On the east leg of Rocky Branch Creek, the only location where soil was found to contain TCDD concentrations greater than 1 ppb was in the yard of 1704 Hill Road and land immediately to the north (Vertac plant property). Concentrations of 2,3,7,8-TCDD in soil in the 1704 Hill Road yard ranged from less than 0.300 ppb to 12 ppb; a ditch just north of this property contained 54 ppb 2,3,7,8-TCDD.

Soil from all other locations in the residential area (Figure 1, Areas C and D), including areas around manholes, and the wooded area along the east leg of Rocky Branch Creek contained less than 1 ppb TCDD. In addition, soil from the banks of the east leg of Rocky Branch Creek (Figure 1, Area B) and bottom sediment from the creek contained less than 1 ppb 2,3,7,8-TCDD. Due to analytical difficulties, data for soil from the banks of the west leg of the creek (Figure 1, Area A) are not confirmed. These data will be reported in a supplement to this report.

Soil from the banks of Bayou Meto (Figure 1, Areas J, K and L) and soil from the perimeter of and the sediment in Lake Dupree (Area I) contained less than 0.300 ppb TCDD.

Soil from two other locations sampled, an area around a manhole near Rocky Branch Creek and South Redmond Road (Figure 1, Area H) and a mound of dirt adjacent to Rocky Branch Creek and the West Main Street bridge (Figure 1, Area O), contained less than 0.300 ppb TCDD.

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2.0

2.0 SAMPLING AND ANALYTICAL PLAN SUMMARY

All sampling was conducted by the Field Analytical and Sampling (FAS) Division of IT Corporation according to the offsite sampling plans for the Vertac chemical site issued with the Order. Any deviation was fully documented, in accordance with the established quality assurance requirements (see Section 4.0 of this report). A representative of the EPA Region VI was present during the field effort in an oversight role as Remedial Project Manager (RPM).

2.1 SAMPLING PROGRAM

An overview of the entire sampling area is shown in Figure 1. Specific sampling reference areas are designated by the letters A through O; brief descriptions of each area are given in the legend. With the approval of the EPA RPM, two sampling area designations (N and O) were added to those initially described in the sampling plans.

In order to determine representative concentrations of TCDD over a large area as quickly and efficiently as possible, certain field sample aliquots were composited for analysis. The compositing technique used is described in Section 3.0 and the strategy for collecting sample aliquots for compositing is described in Section 5.0 of this report. Sampling strategies included fine grid sampling and compositing based on "A Sampling Strategy for Clean-up of Dioxin in Soil" (Attachment 1), gross grid random grab sampling, and individual grab sampling.

A total of 526 samples were collected between June 28 and August 12, 1988; one gross grid sample was collected on September 7, 1988. These samples included soil, sediment, quality control (QC) samples and soil and sediment samples split with EPA. Table A-1 (Appendix A) lists all the samples collected in numerical order. The table shows the date sampled, the sample location description, QC code, composite information, the analysis requested, the laboratory that performed the analysis and the analytical status of each sample. Section 9.0 of this report contains tables defining the abbreviations and codes used in Table A-1.

2.2 ANALYTICAL PROGRAM

A total of 356 samples, excluding splits, were analyzed for TCDD on a 48 hour turnaround basis at TMS Analytical Services, Inc., Indianapolis, Indiana. The analytical procedure used was a semi-isomer specific analysis for 2,3,7,8-TCDD by high resolution gas chromatography/tandem mass spectrometry (GC/MS/MS) (Attachment 2). This method was intended to be used when analytical results are required rapidly. Results of the semi-isomer specific analyses are reported as not detected if concentrations of TCDD of 0.3 ppb or less are found. Samples with TCDD equal to or greater than 1.0 ppb were routinely re-analyzed using high resolution gas chromatography/low resolution mass spectrometry for 2,3,7,8-TCDD only. For re-analysis, either the extract prepared for the initial GC/MS/MS analysis was used or, when necessary, a new extract was prepared from the soil or sediment sample by procedures described in Section III of Attachment 3.

Some samples were held in storage (archive status) until results of samples from adjacent sections were received. If analytical results for the initially analyzed samples showed 1 ppb or greater TCDD concentrations, then samples from the immediately adjacent sections were submitted for analysis. When necessary, additional samples were collected.

The specific sampling program and a summary of the analytical results for each area are given in Section 5.0. In this section the areas are ordered by their reference letter with related areas combined in a single subsection. Maps and tables have been used to present the sample locations and the analytical results. Table A-2 (Appendix A) lists in numerical order all of the samples submitted for TCDD analysis, including quality control samples, along with complete field information and the semi-isomer specific TCDD and 2,3,7,8-TCDD results.

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3.0 GENERAL SAMPLING METHODOLOGY

During the field effort, soil and sediment samples were collected by the procedures detailed below. For any sample that required a sampling procedure deviating from those described, the exact procedure used was documented in the field logbook and the deviation has been noted in the appropriate section of this report. The procedures used to decontaminate sampling equipment are described in Section 6.0.

3.1 SOIL SAMPLING PROCEDURE

A 3/4" hollow stainless steel sampling probe was used to collect each soil core. The depth of take for each core was zero to three inches. Coarser fragments or grasses were not included in the sample. If rocks in the sample area precluded the use of the sampling probe, a stainless steel spoon was used to collect loose soil around the rocks. After collection, each soil aliquot was placed in an aluminum pan for compositing (if required) then the sample was transferred to a glass jar with a stainless steel scoop or spoon and the jar sealed with a teflon-lined lid.

3.2 SEDIMENT SAMPLING PROCEDURES

Sediment samples were collected using three different techniques, approved by the EPA RPM, depending on the type of sediment.

3.2.1 Pond Sediment: Sludge

The top sediment (or sludge) in each pond, basin or lake was collected using an Eckman dredge. The open dredge was lowered from a boat until it settled on top of the sludge, then the closing mechanism was triggered trapping sample material inside. The dredge was retrieved and water was drained out of the dredge. A stainless steel spoon or scoop was used to transfer the sample to an aluminum pan for compositing (if required) or directly to the glass sample jar.

3.2.2 Pond Sediment: Interface

Samples containing the interface between the bottom sediment and the clay bottom of each pond or basin were collected using a 2-1/2" diameter piston-type bed-material hand sampler. The sampler was forced through the sludge with the piston fixed in a closed position preventing material from entering the sampler.

When the sampler reached the interface with the clay bottom it was augered into the clay layer forcing the piston upward and trapping some bottom sediment with the clay core. After the piston was offset one to by three inches it was pulled up creating a vacuum and locking the core in place. The sampler was withdrawn and the core extruded into an aluminum pan for compositing. Each core contained a distinct layer of bottom sediment interfacing with a layer of clay bottom.

3.2.3 Stream Sediment

Each stream sediment sample was collected from the bottom of Rocky Branch Creek at mid-stream using a stainless steel spoon. For this field effort, the stream bed happened to be nearly dry in each area of stream sediment sampling.

3.3 SAMPLE COMPOSITING PROCEDURE

As each soil or sediment aliquot was collected, it was placed in a rectangular aluminum pan. All aliquots for one composite sample were approximately the same mass. Once all the aliquots for one composite sample were collected the soil/sediment was mixed thoroughly with gloved hands or a stainless steel spoon until homogeneous. Rocks, sticks, insects, grass and other coarse fragments were removed from the pan. After mixing, an imaginary grid was drawn on the pan, dividing it into four or six equal sections. An aliquot was taken from each section moving in a clockwise direction and placed into a glass sample jar. The contents of the pan were mixed again, and four or six more portions were placed into the sample jar. This procedure was repeated until approximately 35 grams were collected in the sample jar. The sample jar was sealed with a teflon-lined lid.

3.4 SAMPLE COLLECTION FOR MULTIPLE ANALYSES

Although not within the provisions of the Order, Hercules Incorporated consented to the request of the EPA for collection and analysis of sludge (top sediment) samples from the Aeration Basin (Area F) and Oxidation Ponds (Area G1/G2) of the STP for priority pollutants, pesticides, herbicides and metals and for characterization. Some of these samples were submitted for TCDD analysis as well as the analyses noted above. For these samples, additional sample containers (the number and volume of containers was dependent upon the analyses requested) were filled immediately after filling the glass sample jar for TCDD analysis using

the same procedure described above. The sampling information and analytical results of the samples analyzed for parameters other than dioxin are discussed in a separate document.

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4.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

The quality assurance (QA) goal for this program was to ensure that all information, data and documentation were technically sound, statistically valid and properly documented. In order to accomplish this goal, certain field quality control (QC) activities were performed along with the regular field sample collection activities described in earlier sections. A description of these QC activities and a summary of the ensuing results are presented in this section.

4.1 CONTROL OF DEVIATIONS

Any deviations or additions to the sampling methods detailed in the sampling plans were justified and approved by the EPA Remedial Project Manager (RPM) prior to the commencement of sampling. All deviations were carefully documented in the field logbook or in a correspondence from the EPA RPM to Hercules Incorporated, so the procedure could be repeated if necessary.

4.2 QUALITY CONTROL SAMPLES

Quality control samples included soil blanks, trip blanks, equipment rinsates, duplicate samples and composite mixture check samples. The total number of QA/QC samples analyzed represented a frequency of over 25 percent with respect to the number of field samples collected for analysis. In addition, approximately 10 percent of the total number of samples submitted for analysis were split with the EPA for an additional, external QA/QC check.

4.2.1 Soil Blanks

The sample material used for soil blanks or background samples was collected from the North Vandenburg Boulevard bridge, one-quarter mile west of John Harden Drive and south of the culverts at the Little Rock Air Force Base boundary. Collection of a large quantity of soil was performed following the same procedures previously documented, with the exception that no compositing was performed. The background sample material had characteristics similar to soil collected in the sampling program. Periodically throughout the sampling effort, a sample jar was filled with background soil and submitted as a blank, blind to the laboratory, along with a regular sample shipment. A total of eleven soil blanks were submitted for analysis. All of the soil blanks analyzed were reported as "not detected" at a level of 0.300 parts per billion (ppb) TCDD (see Table A-2, Appendix A).

4.2.2 Trip Blanks

A trip blank consisted of a 40-ml glass vial filled with pesticide-grade hexane, transported to the field, and periodically included with a shipment of site samples to the laboratory for analysis. The purpose of the blank was to monitor potential cross-contamination of the samples during handling and shipment. Ten trip blanks were submitted for TCDD analysis and all were reported as "not detected" at a level of 0.300 nanograms per sample. Analytical results for trip blanks are presented in Table A-2, Appendix A.

4.2.3 Equipment Rinsate Blanks

Equipment rinsate blanks were collected to verify the effectiveness of sampling equipment decontamination procedures and to monitor potential cross-contamination between samples. The rinsate collection procedure consisted of decontaminating the sampling tool according to the routine procedure described in Section 6.0, FIELD DECONTAMINATION OF SAMPLING EQUIPMENT, followed by pouring pesticide-grade hexane over the surfaces of the tool that interface with sample material during collection. The hexane rinsate was then collected in a glass jar with a teflon-lined lid.

A total of nineteen equipment rinsate blanks were submitted for TCDD analysis. All but one of the rinsates were reported as "not detected" at a detection level of 0.300 nanograms per sample. Rinsate sample number WH2240 showed 0.58 ng of TCDD per sample (see Table A-2, Appendix A).

This contaminated rinsate was a composite of two rinses, one performed on each of the two soil sampling probes after sampling a fine grid around manhole number 2735. The soil samples collected with each of these probes prior to and immediately after the rinsate was collected were all reported as "not detected" at 0.300 ppb TCDD level. Another equipment rinse composite was collected ten samples later; it was also "not detected" for TCDD. Upon the request of Hercules Incorporated, sample WH2240 was re-analyzed by the laboratory; the second result showed 0.61 ng of TCDD confirming the initial analysis. However, it is apparent from the data that samples taken following the positive equipment rinsate blank were unaffected by any contamination (see Table A-2, Appendix A).

4.2.4 Field Duplicates

Field duplicate samples were collected to determine the reproducibility of the sampling procedures as well as the reproducibility of the analytical procedures. Duplicate samples were collected periodically throughout the sampling effort to represent the different types of samples and the different sample collection procedures (i.e. soils/sediment samples, grab and fine grid composite samples).

Samples selected for preparation as duplicates were collected according to the procedures described in Section 3.0. Portions were then taken for the original sample, the remaining sample material was re-mixed, and then portions were taken for the duplicate sample. Each duplicate sample was given a unique sample number so that its relationship with the original sample would be unknown to the laboratory.

A total of 24 field duplicate samples were submitted for analysis. The duplicate and original sample results are reported along with all other field samples in the summary tables in appropriate sections of Section 5.0 and in Table A-2, Appendix A. Duplicate samples are indicated by the code "QDU" and original samples are indicated by the code "ORIG". A duplicate pair can be matched by cross-referencing the sample numbers. It is important to note that variation in analytical results between a duplicate and original sample can represent any variation that could have occurred during sample collection, sample handling and shipping, preparation for analysis, and analysis as well as variation inherent in the analytical method.

Tables 1 and 2 present a summary of the analytical results for the duplicate samples for TCDD and 2,3,7,8-TCDD. Relative percent differences (RPDs) have been calculated according to the following equation:

$$RPD = \frac{|D_1 - D_2|}{\left(\frac{D_1 + D_2}{2}\right)} \times 100$$

D_1 = original measurement
D_2 = duplicate measurement

Table 1. Field Duplicate
Results Summary
TCDD

Original Sample Number	Duplicate Sample Number	Sample Type	Original Result (ppb)	Duplicate Result (ppb)	RPD (%)
WH1411	WH1412	Soil	0.569	0.489	15
WH1449	WH1450	Soil	0.304	ND(0.3)	a
WH1467	WH1468	Soil	ND(0.3)	ND(0.3)	b
WH1490	WH1493	Soil	ND(0.3)	ND(0.3)	b
WH2026	WH2027	Soil	4.75	2.843	50
WH2039	WH2040	Soil	1.308	1.65	23
WH2045	WH2046	Sediment	ND(0.3)	ND(0.3)	b
WH2065	WH2066	Soil	ND(0.3)	ND(0.3)	b
WH2092	WH2093	Soil	1.727	1.443	18
WH2103	WH2104	Soil	0.631	0.629	0.3
WH2149	WH2156	Soil	ND(0.3)	ND(0.3)	b
WH2149	WH2157	Soil	ND(0.3)	ND(0.3)	b
WH2190	WH2191	Soil	ND(0.3)	ND(0.3)	b
WH2209	WH2210	Sediment	ND(0.3)	ND(0.3)	b
WH2222	WH2226	Sediment	2.840	2.336	19
WH2229	WH2232	Core	ND(0.3)	ND(0.3)	b
WH2314	WH2316	Soil	2.849	2.814	1.2
WH2321	WH2324	Soil	1.775	2.388	29
WH2329	WH2332	Soil	3.465	2.863	19
WH2340	WH2341	Sediment	ND(0.3)	ND(0.3)	b
WH2345	WH2347	Soil	ND(0.3)	ND(0.3)	b
WH2349	WH2351	Soil	ND(0.3)	ND(0.3)	b
WH2355	WH2357	Soil	11.577	5.128	77

[a]RPD cannot be calculated.

[b]RPD cannot be calculated; however, the two results do indicate that reproducibility has been demonstrated.

Table 2. Field Duplicate
Results Summary
2,3,7,8-TCDD

Original Sample Number	Duplicate Sample Number	Sample Type	Original Result (ppb)	Duplicate Result (ppb)	RPD (%)
WH2039	WH2040	Soil	1.33	1.85	33
WH2092	WH2093	Soil	1.66	1.41	16
WH2222	WH2226	Sediment	2.83	1.07	90
WH2321	WH2324	Soil	1.88	2.30	20
WH2329	WH2323	Soil	3.34	2.78	18
WH2355	WH2357	Soil	11.65	5.1	78
WH2026	WH2027	Soil	2.36	2.79	17
WH2314	WH2316	Soil	3.09	2.69	14

Only one of the TCDD RPDs and two of the 2,3,7,8-TCDD RPDs are above 50 percent. Including the outlying result, the average RPD for TCDD is 25(±23); excluding this result the average is 19(±15). Including the two outlying results, the average RPD for 2,3,7,8-TCDD is 36(±30); excluding the outliers, the average is 10(±7). The EPA control limit for the RPD between duplicate TCDD measurements is <50%. As can be seen from the tables, the field duplicate samples showed, overall, acceptable reproducibility in both TCDD and 2,3,7,8-TCDD analyses.

4.2.5 Composite Mixture Check Samples

Composite "mix" check samples were collected to evaluate the thoroughness of the mixing process during composite sample collection and to monitor any potential variation within the composited sample material. The "mix" check sample collection procedure consisted of taking the sample aliquots according to the appropriate procedure for a soil or sediment sample and compositing the aliquots as described in Section 3.3 SAMPLE COMPOSITING PROCEDURE. The aluminum pan used for mixing was then divided into four quadrants and the original sample collected by taking portions from each quadrant in a clockwise direction, as previously described and illustrated below:

A	B
D	C

Aluminum Pan containing composited soil or sediment

Without additional mixing, four "mix" check samples were then taken, one from each quadrant. Each "mix" check sample was given a unique sample number; the appropriate suffix (A,B,C or D) was appended for data management purposes. Mixture checks were performed on three composite samples for a total of 12 individual "mix" check samples submitted for analysis. Analytical results for these samples are included in appropriate summary tables in Section 5.0 and in Table A-2, Appendix A. Of these 12, eight "mix" checks and the corresponding original

samples were reported as "not detected" at 0.300 ppb TCDD. The remaining four "mix" checks and the corresponding original sample contained measurable amounts of TCDD. The results for these soil samples were as follows:

SAMPLE NUMBER	TOTAL TCDD (ppb)	QA/QC CODE	RPD FROM ORIG (%)	RPD FROM MEAN (%)
WH 2054	.728	ORIG		
WH 2055A	.857	QDM	16.3	16.2
WH 2056B	.820	QDM	11.9	20.6
WH 2057C	1.185	QDM	47.8	16.1
WH 2058D	1.172	QDM	46.7	15.0

RPD = Relative percent difference
QDM - Composite mixture check sample

To determine the amount of variation between the original and each "mix" check sample, the RPD between them was calculated (as if each "mix" check and original were a duplicate pair). To evaluate the variation among the four quadrant samples the RPD between each "mix" check sample and the mean of all four "mix" check samples has been calculated and tabulated along with the results presented above. The EPA control limit for the RPD between duplicate TCDD measurements is ≤50%. As can be seen, both the differences between the concentration of each "mix" check sample and the original and the differences among the four "mix" check samples are within the EPA control limits.

4.3 FIELD SPLIT SAMPLES

As an additional QA/QC check, over 10 percent of all field samples analyzed were split with the EPA. The samples to be split were selected by the EPA RPM, and were collected, composited (as required), and mixed by the routine procedure. Twice the normal volume was then placed into the original sample jar, the jar was shaken, and its contents were split by transferring half of the sample material to a second glass sample jar. The split sample was given a unique sample number. Cross-reference information identifying the original sample and the split sample was recorded on the sample collection log for each paired sample. The custody of all split samples was transferred to the EPA Field Investigative Team representative using EPA Chain-of-Custody procedures. A total of 32 split samples were collected during this field effort. Table A-3 in Appendix A lists all the split samples and the corresponding field information.

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5.0 SAMPLE AREA DESCRIPTIONS AND PRESENTATION OF ANALYTICAL RESULTS

This section contains a description of each sampling area and the specific sampling strategy used in that area. It also contains figures illustrating each area, showing the sample collection locations and the analytical results. Quality control sample results are not included in the figures; however, results of field duplicates and "mix" check samples are included in the summary table preceding each figure(s). All analytical results and other information for each sample are presented in numerical order in Table A-2, Appendix A.

5.1 AREAS A AND B: BANKS AND BOTTOM OF ROCKY BRANCH CREEK (WEST AND EAST LEGS)

Areas A and B comprise the sections of Rocky Branch Creek which border the residential area south of and adjacent to the Vertac Plant property. The areas extend from the Vertac property line to the confluence of the west and east tributaries. The west leg of the creek or main tributary is Area A; the east leg is Area B. Sampling was conducted in the following manner:

Soil:

- The creek legs were divided into 500 feet sections for each composite sample.
- Samples were taken every 10 feet on the wall of the creek on each side of the creek, designated left and right bank facing upstream.
- Samples were taken 6" above water level; 12" above water level; 36" above water level. Initially only the 6" sample was analyzed. If concentrations at or above 1 ppb 2,3,7,8-TCDD were present then the samples from the next elevation were analyzed.

Sediment: (collected at mid-stream)

- One bottom grab sample was taken in the west leg of Rocky Branch Creek at the southern boundary of the Vertac site, in the east leg of Rocky Branch Creek at the southern boundary of the Vertac site (1704 Hill Road property line), and the confluence of the two legs, for a total of 3 samples. Each sample was analyzed.

Because of dry conditions resulting from a prolonged drought and to maintain a consistent reference elevation, a theoretical water level was established. An elevation bench mark was designated at the bridge over Rocky Branch at West Main Street. An arbitrarily established depth of one foot of water was measured at the concrete bridge abutment base. A transit level was used to determine the amount of fall evident from the fence at the plant site to the confluence of the east and west legs of Rocky Branch. A 9.5-foot drop was determined over the 2,230 feet involved in the sampling for the west leg. The entire length was surveyed and one foot water elevation markers (theoretical) were installed to reference the desired sample elevations. Water was present at most locations on the east leg; when dry areas were encountered, the techniques adopted for the west leg were utilized to establish a theoretical water level reference on the east leg.

The analytical results revealed that the soil samples from the east leg and the sediment samples from Rocky Branch Creek contained less than 1 ppb 2,3,7,8-TCDD. Table 3 and Figure 2 present the sample locations for Areas A and B along with the results for TCDD analyses and isomer-specific 2,3,7,8-TCDD analyses when applicable. Due to analytical difficulties, the data for soil samples from the west leg are not confirmed. Based upon an agreement between Hercules Incorporated and the EPA RPM, these data are not reported here. The data will be reported in a supplement to this report.

TABLE 3

AREAS A and B: BANKS AND BOTTOM OF WEST AND EAST LEGS OF ROCKY BRANCH CREEK
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL AND SEDIMENT SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
	AREA A: BANKS OF WEST LEG - SOIL		
WH1354	0 to 500 ft, Left Bank, 6 inches above water	TBR	TBR
WH1355	0 to 500 ft, Right Bank, 6 inches above water	TBR	TBR
WH1361	510 to 1000 ft, Left Bank, 6 inches above water	TBR	TBR
WH1362	510 to 1000 ft, Right Bank, 6 inches above water	TBR	TBR
WH1367	1010 to 1500 ft, Left Bank, 6 inches above water	TBR	TBR
WH1368	1010 to 1500 ft, Right Bank, 6 inches above water	TBR	TBR
WH1375	1510 to 2000 ft, Left Bank, 6 inches above water (ORIG)	TBR	TBR
WH1377	1510 to 2000 ft, Left Bank, 6 inches above water (QDU of WH1375)	TBR	TBR
WH1374	1510 to 2000 ft, Right Bank, 6 inches above water	TBR	TBR
WH1385	2010 to 2230 ft, Left Bank, 6 inches above water	TBR	TBR
WH1384	2010 to 2230 ft, Right Bank, 6 inches above water	TBR	TBR
	AREA B: BANKS OF EAST LEG - SOIL		
WH1415	10 to 500 ft, Left Bank, 6 inches above water	0.387	N/A
WH1418	10 to 500 ft, Right Bank, 6 inches above water	0.300 U	N/A
WH1425	510 to 1000 ft, Left Bank, 6 inches above water	0.300 U	N/A
WH1424	510 to 1000 ft, Right Bank, 6 inches above water	0.300 U	N/A
WH1431	1010 to 1500 ft, Left Bank, 6 inches above water	0.475	N/A
WH1430	1010 to 1500 ft, Right Bank, 6 inches above water	0.872	N/A
WH1437	1510 to 2000 ft, Left Bank, 6 inches above water	0.632	N/A
WH1436	1510 to 2000 ft, Right Bank, 6 inches above water	0.300 U	N/A
WH1443	2010 to 2500 ft, Left Bank, 6 inches above water	0.682	N/A
WH1444	2010 to 2500 ft, Right Bank, 6 inches above water	0.335	N/A
WH1449	2510 to 2940 ft, Left Bank, 6 inches above water (ORIG)	0.304	N/A
WH1450	2510 to 2940 ft, Left Bank, 6 inches above water (QDU of WH1449)	0.300 U	N/A
WH2016	2510 to 2940 ft, Right Bank, 6 inches above water	2.159	0.16
WH2241	2510 to 2940 ft, Right Bank, 6 inches above water, resample	0.300 U	N/A
WH2018	2510 to 2940 ft, Right Bank, 12 inches above water	0.300 U	N/A
	AREAS A and B: BOTTOM SEDIMENT		
WH1352	Confluence of East and West Legs	0.300 U	N/A
WH1378	Area A: West Leg Leg at Vertac fence	0.300 U	N/A
WH2045	Area B: East Leg at 1704 Hill property line (ORIG)	0.300 U	N/A
WH2046	Area B: East Leg at 1704 Hill propery line (QDU of WH2045)	0.300 U	N/A

D - Duplicate analytical sample
U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair
TBR - To be reported in supplement to this report

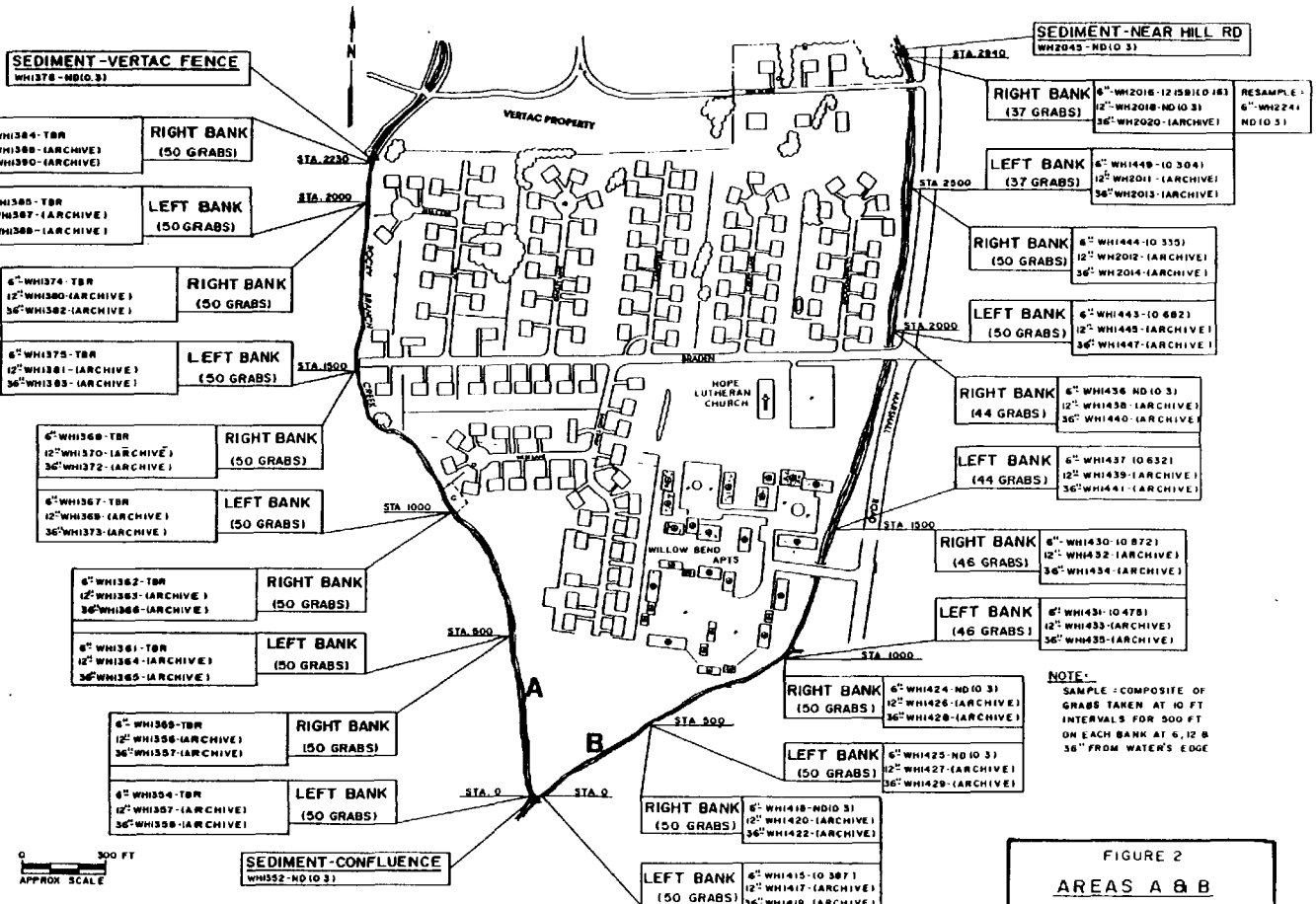

FIGURE 2

AREAS A & B

ROCKY BRANCH BANK ELEV

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5.2 AREAS C AND D: ROCKY BRANCH CREEK (RESIDENTIAL AREA)

Area C encompasses a narrow strip of land immediately south of the Vertac Plant and adjacent to the east and west legs of Rocky Branch Creek. Area D includes all the residential property between the two creek tributaries. Fine grid sampling strategy was used in Area C while random grab sampling within a gross (large) grid was used in Area D. Figure 3 presents an overview of Area C showing the sampling stations of the wooded area near the creek confluence and the individual addresses sampled in the residential area. Detailed drawings for specific locations are presented later in this document as noted in Figure 3.

The fine grid sampling techniques were based on the document "A Sampling Strategy for Cleanup of Dioxin in Soil" (Attachment 1). Modifications were made at some specific sampling locations at the recommendation or with the approval of the EPA RPM. Two different basic grid plans were used for two sections within Area C. These sections are: 1) the wooded ("non-residential") section nearer the creek confluence south of 2111 West Lane on the west leg of Rocky Branch Creek and south of Braden Street on the east leg; and 2) the residential section just south of the Vertac property. Table A-2 (Appendix A) presents the field information and analytical results for all samples collected, listed in numerical order.

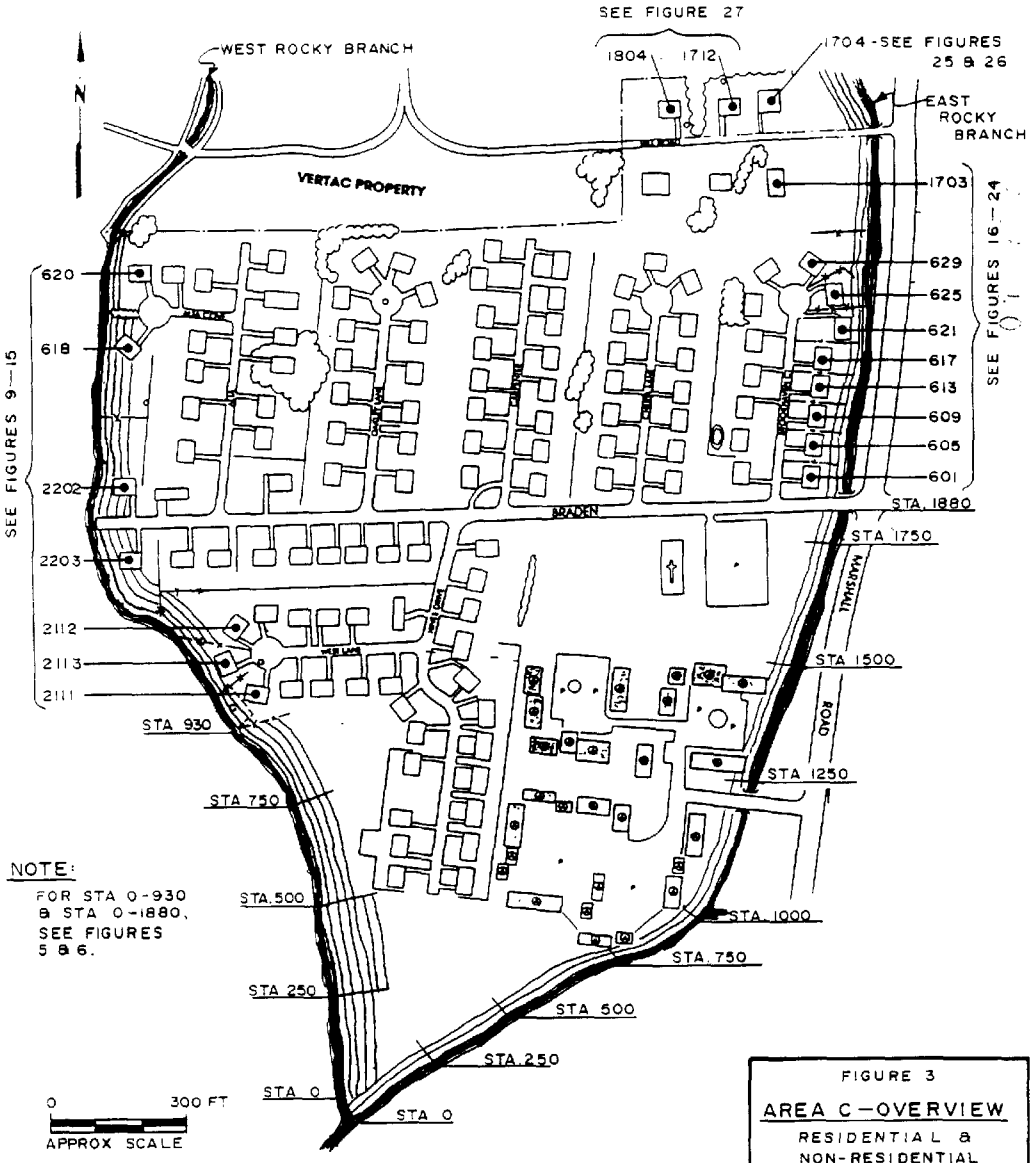

FIGURE 3

AREA C—OVERVIEW

RESIDENTIAL & NON-RESIDENTIAL

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5.2.1 Area C: "Non-Residential" Wooded Area

For the purposes of this report, the section of Area C where single-family residences are not actually located is defined as the "non-residential" section. Figure 4 diagramatically presents a typical sampling grid used in this section of Area C. Each grid unit (or row) was 20ft x 250ft (5000 sq.ft.). Each row was divided into 50 equal blocks of size 10 by 10 feet by setting up two lines parallel to the long axis of the row, 10 feet apart and 5 feet from each side of the row. Markers were then placed every 10 feet along these lines starting 5 feet from one end. Each marker was at the center of the 10 by 10 foot block as illustrated in the figure.

Three composite samples were obtained from each row according to the systematic pattern shown in Figure 4. Referring to the figure the letters N,S,E and W represent sample aliquot locations 2.5 feet to the north, south, east or west of the center markers (reference point) in each row. All north aliquots in one row were composited, all south aliquots in one row were composited and so forth, such that each row had three composite samples of 50 aliquots each, unless obstacles necessitated a modification. On the west leg of Rocky Branch the north, south, and west composite samples were collected; on the east leg, the north, south, and east composite samples were collected. Each collection of sample material was thoroughly mixed and homogenized as described in Section 3.3 SAMPLE COMPOSITING PROCEDURE.

During the surveying of the sampling grid units, the confluence of the east and west legs of Rocky Branch was designated as Station 0 (Zero). At 250-foot increments, subsequent stations were marked moving upstream on each leg of the creek (See Figure 5).

Initially, two adjacent rows between each station were surveyed and sampled. The rows were identified as Row 1 (adjacent to the creek) and Row 2 (further into the wooded area). All three composite samples collected from Row 1 were analyzed first; if the results for any composite were above 1 ppb TCDD, then that composite sample was analyzed for 2,3,7,8-TCDD to confirm the level of contamination and composite samples from Row 2 were analyzed for TCDD. If results from Row 2 were again above 1 ppb, the EPA RPM recommended sampling two additional rows further into the wooded area, in that same 250 foot section.

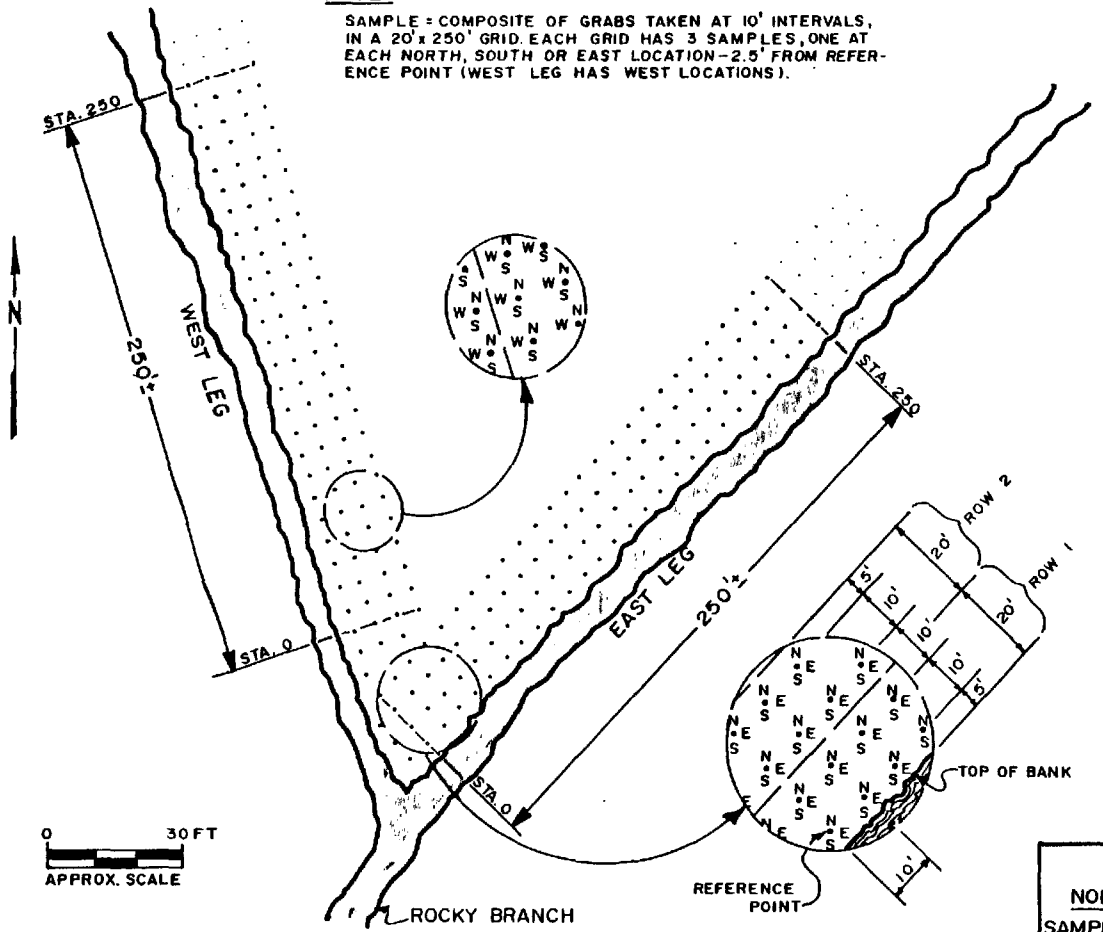

FIGURE 4

NON-RESIDENTIAL

SAMPLING GRID PATTERN

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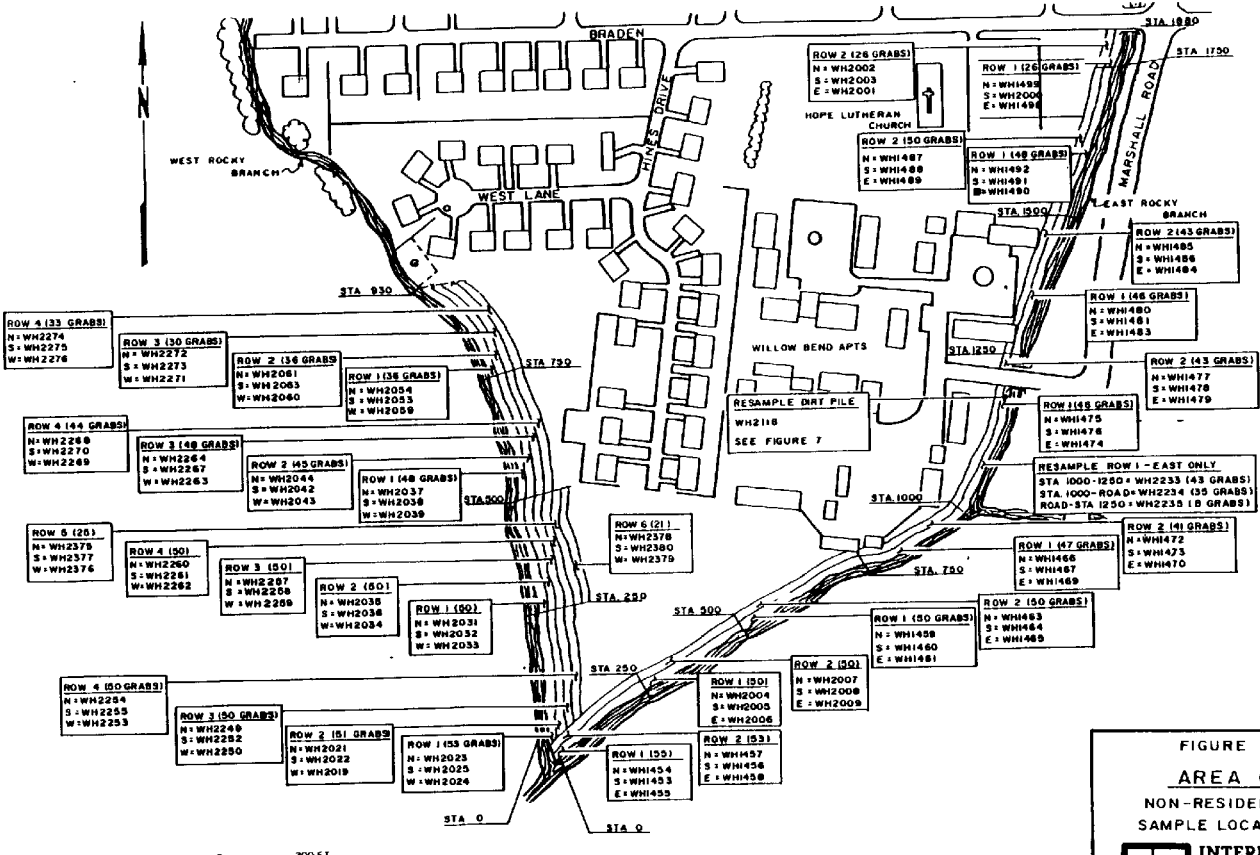

FIGURE 5

AREA C

NON-RESIDENTIAL

SAMPLE LOCATIONS

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These samples were submitted for analysis one row at a time and sampling continued until composite sample results showed less than 1 ppb TCDD. Each sample with results of 1 ppb or greater for TCDD was analyzed for the specific 2,3,7,8-TCDD isomer using high resolution GC/low resolution MS. Any sample not required for analysis was maintained in secured storage under archive status. Figure 5 shows all the grid units that were sampled during this field effort and the three sample numbers associated with each unit or row.

Table 4 and Figure 6 present data for soil samples collected from this "non-residential" area along the west leg of Rocky Branch Creek. Low levels of dioxin, ranging from less than 0.300 ppb to 2.9 ppb were found in sections of this land closest to the creek. For each section, the extent of contamination was delineated by the results from the eastern-most portion sampled which were all less than 1 ppb dioxin.

Table 5 and Figure 6 present data for soil samples collected from the area adjacent to the east leg of Rocky Branch Creek. All soil samples taken from sections along the east leg had less than 0.300 ppb dioxin, except for one of three composites taken from Row 1 between Station 1000 and 1250. This particular unit had some unusual physical features; it was divided by a road and it contained a large mound of fill dirt on the bank of the creek just south of the road. In an attempt to isolate the source of the TCDD found in the east composite sample, Row 1 was re-sampled (the east aliquot locations only) in its original linear run, excluding the mound of dirt adjacent to the creek, and was divided into two sections north and south of the road for two additional sample composites.

Sample WH2233 was collected from the full row, sample WH2234 was collected from Station 1000 to the road, and sample WH2235 was collected from the section between the road and station 1250. Aliquots from the mound of fill dirt were not added to any of these samples because it appeared to have been from another location.

TABLE 4

AREA C - "NON-RESIDENTIAL" WOODED AREA ALONG WEST LEG OF ROCKY BRANCH CREEK
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2023	0 to 250 ft, Row 1: North	2.138	2.01
WH2025	0 to 250 ft, Row 1: South	2.172	2.88
WH2024	0 to 250 ft, Row 1: West	0.300 U	N/A
WH2021	0 to 250 ft, Row 2: North	1.520	1.98
WH2022	0 to 250 ft, Row 2: South	1.484	1.68
WH2019	0 to 250 ft, Row 2: West	1.402	1.79
WH2249	0 to 250 ft, Row 3: North	0.723	N/A
WH2252	0 to 250 ft, Row 3: South	0.869	N/A
WH2250	0 to 250 ft, Row 3: West	0.794	N/A
WH2031	250 to 500 ft, Row 1: North	2.889	2.73
WH2032	250 to 500 ft, Row 1: South	2.958	2.67
WH2033	250 to 500 ft, Row 1: West	2.716	2.53
WH2035	250 to 500 ft, Row 2: North	1.986	1.83
WH2036	250 to 500 ft, Row 2: South	1.864	1.90
WH2034	250 to 500 ft, Row 2: West	2.153	2.02
WH2257	250 to 500 ft, Row 3: North	1.740	1.08
WH2258	250 to 500 ft, Row 3: South	1.476	1.74
WH2259	250 to 500 ft, Row 3: West	0.961	0.96
WH2260	250 to 500 ft, Row 4: North	0.867	1.15
WH2261	250 to 500 ft, Row 4: South	1.476	1.32
WH2262	250 to 500 ft, Row 4: West	1.255	1.45
WH2375	250 to 500 ft, Row 5: North	1.239	1.23
WH2377	250 to 500 ft, Row 5: South	1.334	1.34
WH2376	250 to 500 ft, Row 5: West	1.275	1.28
WH2378	250 to 500 ft, Row 6: North	0.849	N/A
WH2380	250 to 500 ft, Row 6: South	0.960	N/A
WH2379	250 to 500 ft, Row 6: West	0.890	N/A
WH2037	500 to 750 ft, Row 1: North	1.246	1.26
WH2038	500 to 750 ft, Row 1: South	1.826	1.81
WH2039	500 to 750 ft, Row 1: West (ORIG)	1.308	1.33
WH2040	500 to 750 ft, Row 1: West (QDU of WH2039)	1.650	1.85
WH2044	500 to 750 ft, Row 2: North	0.738	N/A
WH2042	500 to 750 ft, Row 2: South	0.693	0.65
WH2043	500 to 750 ft, Row 2: West	1.445	1.55
WH2264	500 to 750 ft, Row 3: North	0.300 U	N/A
WH2267	500 to 750 ft, Row 3: South	0.300 U	N/A
WH2263	500 to 750 ft, Row 3: West	0.417	N/A
WH2054	750 to 930 ft, Row 1: North	0.728	N/A
WH2055A	750 to 930 ft, Row 1: North (QDM of WH2054)	0.857	N/A
WH2056B	750 to 930 ft, Row 1: North (QDM of WH2054)	0.820	N/A
WH2057C	750 to 930 ft, Row 1: North (QDM of WH2054)	1.185	1.18
WH2058D	750 to 930 ft, Row 1: North (QDM of WH2054)	1.172	1.23
WH2053	750 to 930 ft, Row 1: South	0.412	N/A
WH2059	750 to 930 ft, Row 1: West	0.922	0.95
WH2061	750 to 930 ft, Row 2: North	1.627	1.09
WH2063	750 to 930 ft, Row 2: South	1.004	0.87
WH2060	750 to 930 ft, Row 2: West	0.976	1.42
WH2272	750 to 930 ft, Row 3: North	0.695	N/A
WH2273	750 to 930 ft, Row 3: South	0.584	N/A
WH2271	750 to 930 ft, Row 3: West	0.729	N/A

Measurement of distances begins at the junction of the West and East Legs; see Fig. 4, 5 and 6.
U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair
QDM - Composite mixture check

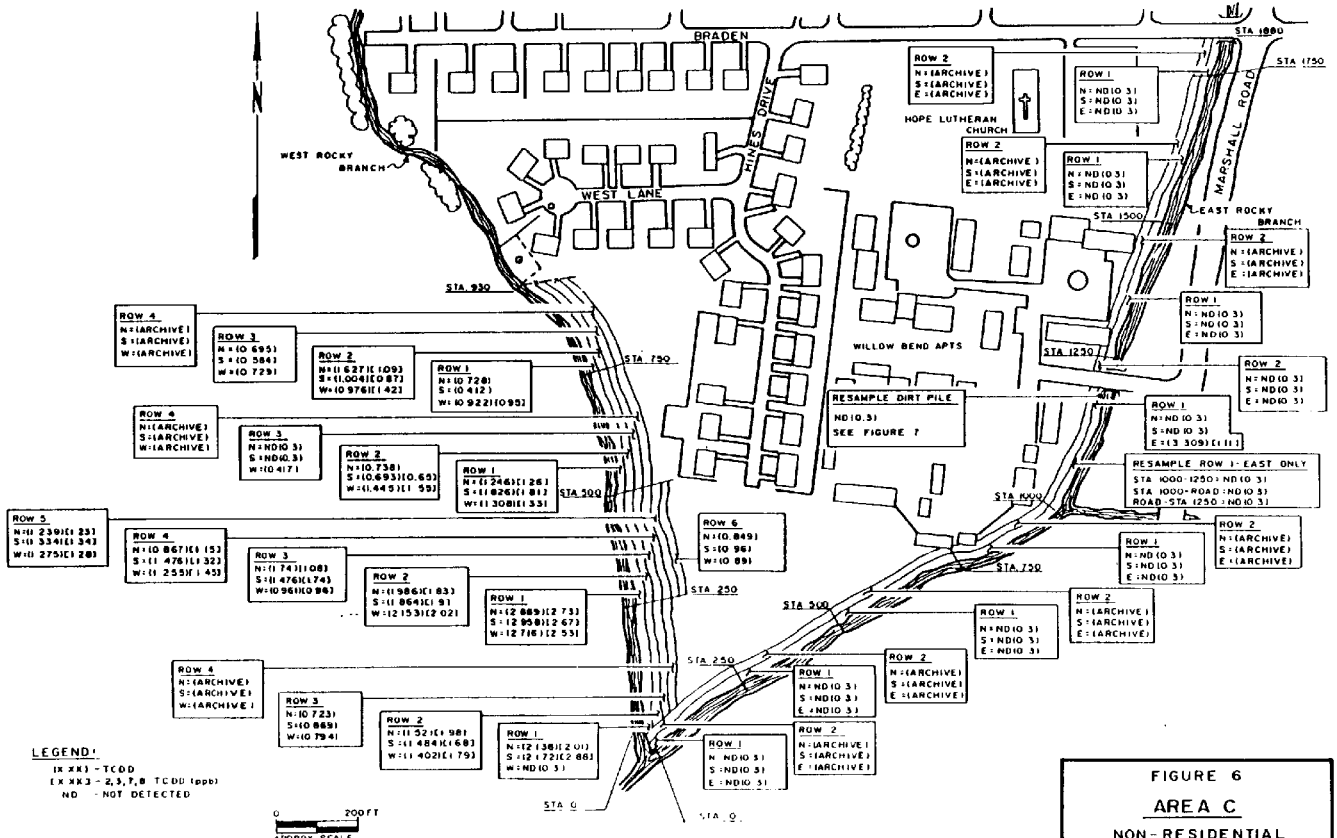

FIGURE 6

AREA C

NON-RESIDENTIAL SAMPLE RESULTS

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TABLE 5

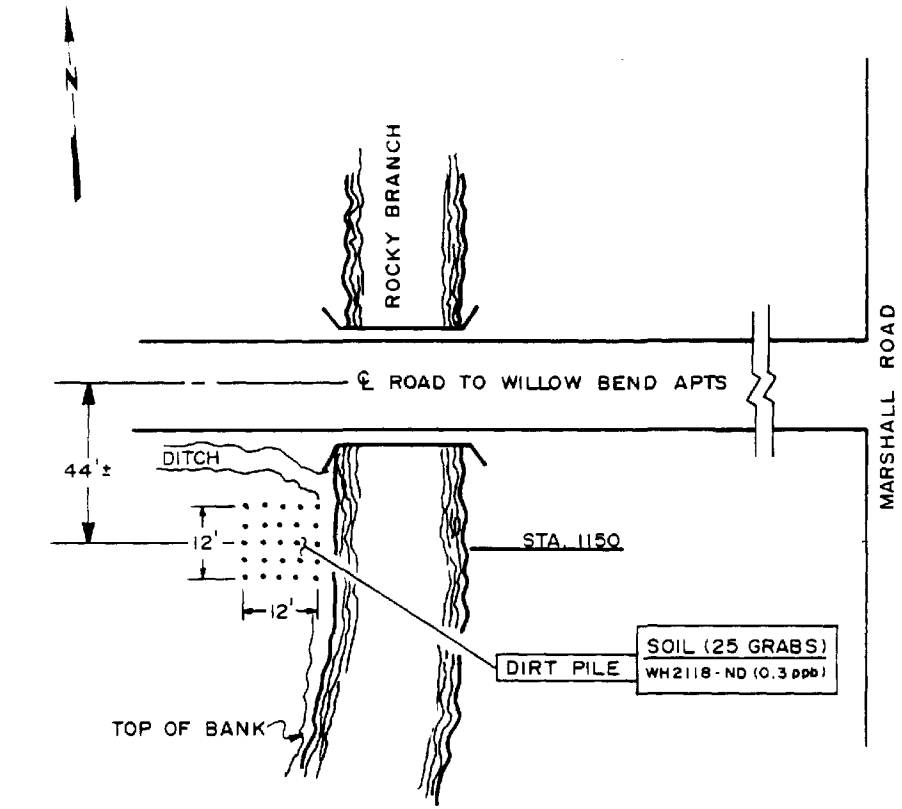
AREA C: "NON-RESIDENTIAL" WOODED AREA ALONG EAST LEG OF ROCKY BRANCH CREEK
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH1454	0 to 250 ft, Row 1: North	0.300 U	N/A
WH1453	0 to 250 ft, Row 1: South	0.300 U	N/A
WH1455	0 to 250 ft, Row 1: East	0.300 U	N/A
WH2004	250 to 500 ft, Row 1: North	0.300 U	N/A
WH2005	250 to 500 ft, Row 1: South	0.300 U	N/A
WH2006	250 to 500 ft, Row 1: East	0.300 U	N/A
WH1459	500 to 750 ft, Row 1: North	0.300 U	N/A
WH1460	500 to 750 ft, Row 1: South	0.300 U	N/A
WH1461	500 to 750 ft, Row 1: East	0.300 U	N/A
WH1466	750 to 1000 ft, Row 1: North	0.300 U	N/A
WH1467	750 to 1000 ft, Row 1: South (ORIG)	0.300 U	N/A
WH1468	750 to 1000 ft, Row 1: South (QDU of WH1467)	0.300 U	N/A
WH1469	750 to 1000 ft, Row 1: East	0.300 U	N/A
WH1475	1000 to 1250 ft, Row 1: North	0.300 U	N/A
WH1476	1000 to 1250 ft, Row 1: South	0.300 U	N/A
WH1474	1000 to 1250 ft, Row 1: East	3.309	1.11
WH2233	1000 to 1250 ft, Row 1: East, resample	0.300 U	N/A
WH2234	1000 to 1250 ft, East, 1000 ft to road	0.300 U	N/A
WH2235	1000 to 1250 ft, East, road to 1250 ft	0.300 U	N/A
WH2118	Dirt pile at fence corner between Willow Bend Apartments and East Leg of Rocky Branch	0.300 U	N/A
WH1477	1000 to 1250 ft, Row 2, North	0.300 U	N/A
WH1478	1000 to 1250 ft, Row 2, South	0.300 U	N/A
WH1479	1000 to 1250 ft, Row 2: East	0.300 U	N/A
WH1480	1250 to 1500 ft, Row 1: North	0.300 U	N/A
WH1481	1250 to 1500 ft, Row 1: South	0.300 U	N/A
WH1483	1250 to 1500 ft, Row 1: East	0.300 U	N/A
WH1492	1500 to 1750 ft, Row 1: North	0.300 U	N/A
WH1491	1500 to 1750 ft, Row 1: South	0.300 U	N/A
WH1490	1500 to 1750 ft, Row 1: East (ORIG)	0.300 U	N/A
WH1493	1500 to 1750 ft, Row 1: East (QDU of WH1490)	0.300 U	N/A
WH1494A	1500 to 1750 ft, Row 1: East (QDM of WH1490)	0.300 U	N/A
WH1495B	1500 to 1750 ft, Row 1: East (QDM of WH1490)	0.300 U	N/A
WH1496C	1500 to 1750 ft, Row 1: East (QDM of WH1490)	0.300 U	N/A
WH1497D	1500 to 1750 ft, Row 1: East (QDM of WH1490)	0.300 U	N/A
WH1499	1750 to 1880 ft, Row 1: North	0.300 U	N/A
WH2000	1750 to 1880 ft, Row 1: South	0.300 U	N/A
WH1498	1750 to 1880 ft, Row 1: East	0.300 U	N/A

Measurement of distances begins at the junction of the West and East Legs; see Fig. 4, 5 and 6.

U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair
QDM - Composite mixture check

A separate 12 by 12 foot fine grid was established in the area including the mound of dirt (see Figure 7). Twenty-five grab soil samples were collected, each 3 feet apart within the grid; the sample aliquots were composited to generate one sample for analysis. As Figures 6 and 7 show, all the re-sample results were "not detected" at a level of 0.300 ppb TCDD.



LEGEND:

(X.XX) - TCDD

ND - NOT DETECTED

FIGURE 7

DIRT PILE AT WILLOW BEND APTS

7-16-88

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5.2.2 Area C: "Residential"

For the purposes of this report, the section of Area C where private residential property is located within the sampling area is defined as the "residential" area. The fine grid sampling strategy used for the residential property in this area was generally the same as that used for Area C "non-residential" (see Section 5.2.1), except that the grid unit dimensions were 20 feet by property line. Figure 8 diagramatically presents a typical sampling grid in the residential area adjacent to the west leg of Rocky Branch Creek. Adjacent to the east leg, samples were collected at points north, south and east of the reference point.

As in the "non-residential" area, two 20-foot wide grids (rows) were sampled initially. The three composite samples from Row 1 were analyzed first. If the semi-isomer specific TCDD level was 1 ppb or greater in any of the three samples, Row 2 composite samples were analyzed. In all cases, samples with TCDD concentrations of 1 ppb or greater were also analyzed for 2,3,7,8-TCDD. If results for Row 2 composite samples were 1 ppb or greater, two additional grids, further away from the creek were sampled and analyzed one row at a time until sample results indicated less than 1 ppb TCDD.

Included in the sampling plan for the "residential" area were areas adjacent to and including manholes. The grid sampling plan used for manhole areas differed slightly from the plan described above for residential property. The differences included: (1) the distance between the reference point markers which determined distances to aliquot collection locations; and (2) the overall dimensions of the grid. Both measurements were determined at the specific location and were dependent on site-specific needs. All other factors (e.g., number of composites collected) remained the same.

For greater detail in showing grid dimensions and sample aliquot collection locations, each private residential property and manhole sampled is presented in an individual figure. The following residential properties were sampled: 2111, 2113 and 2112 West Lane; 2203 and 2202 Braden Street; 618 and 620 Alta Cove; 601, 605, 609, 613, 617, 621, 625 and 629 Brookhaven Court; and 1703 and 1704 Hill Road. Figure 3 shows the location of each residential property relative to other locations in Area C.

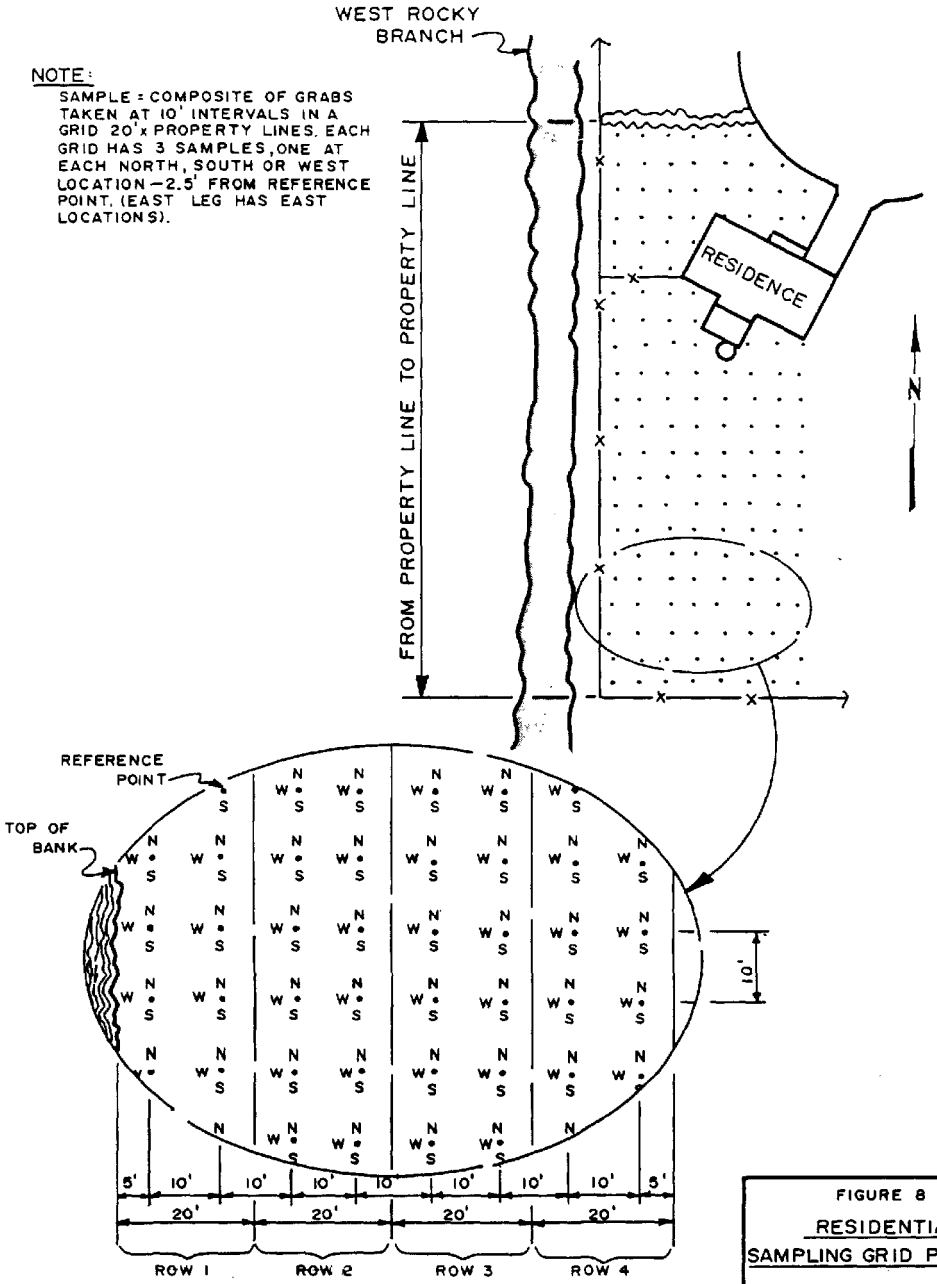

FIGURE 8
RESIDENTIAL
SAMPLING GRID PATTERN

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Table 6 and Figures 9 through 15 (pages 35 through 42) present analytical results for residential property located adjacent to the west leg of Rocky Branch Creek. Soil composite samples taken from the yards of three residential properties along the west leg (2203 Braden, 2202 Braden and 2112 West Lane) showed the presence of dioxin; the highest concentration detected was 4 ppb. The extent of contamination in each of these yards was determined by sampling and analyses until a section with less than 1 ppb dioxin was reached. All other properties adjacent to the west leg had soil with 2,3,7,8-TCDD concentrations less than 1 ppb.

Table 7 and Figures 16 through 24 (pages 43 through 52) present analytical results for residential properties adjacent to the east leg of Rocky Branch Creek with the exception of 1704 Hill Road. Soil samples from the properties along the east leg with the exception of 1704 Hill contained less than 0.300 ppb dioxin.

Descriptions of the sampling done at 1704 Hill Road and contiguous areas are presented on pages 53 through 58. A table and three figures present the analytical results and a diagrammatic representation of the grids and locations sampled at this location.

Descriptions of sampling and analytical results for additional manhole areas in Area C are presented on pages 58 through 61.

TABLE 6

AREA C: "RESIDENTIAL" AREA ALONG WEST LEG OF ROCKY BRANCH CREEK
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2074	2111 West Lane, Row 1, North	0.300 U	N/A
WH2075	2111 West Lane, Row 1, South	0.300 U	N/A
WH2073	2111 West Lane, Row 1, West	0.546	N/A
WH2067	2113 West Lane, Row 1, North	0.300 U	N/A
WH2068	2113 West Lane, Row 1, South	0.300 U	N/A
WH2065	2113 West Lane, Row 1, West (ORIG)	0.300 U	N/A
WH2066	2113 West Lane, Row 1, West (QDU of WH2065)	0.300 U	N/A
WH2080	2112 West Lane, Row 1, North	3.498	3.43
WH2081	2112 West Lane, Row 1, South	4.313	4.18
WH2082	2112 West Lane, Row 1, West	3.528	3.59
WH2085	2112 West Lane, Row 2, North	1.343	1.24
WH2083	2112 West Lane, Row 2, South	2.702	2.74
WH2084	2112 West Lane, Row 2, West	1.637	1.51
WH2277	2112 West Lane, Row 3, North	0.539	N/A
WH2278	2112 West Lane, Row 3, South	0.716	N/A
WH2282	2112 West Lane, Row 3, West	0.575	N/A
WH2087	2203 Braden, Row 1, North	1.911	1.87
WH2088	2203 Braden, Row 1, South	2.497	2.39
WH2086	2203 Braden, Row 1, West	2.329	2.27
WH2089	2203 Braden, Row 2, North	1.253	1.20
WH2091	2203 Braden, Row 2, South	1.265	1.21
WH2090	2203 Braden, Row 2, West	1.080	1.11
WH2287	2203 Braden, Row 3, North	0.300 U	N/A
WH2286	2203 Braden, Row 3, South	1.621	0.33
WH2289	2203 Braden, Row 3, West	0.300 U	N/A
WH2292	2203 Braden, Row 4, North	0.300 U	N/A
WH2291	2203 Braden, Row 4, South	0.300 U	N/A
WH2290	2203 Braden, Row 4, West	0.300 U	N/A
WH2094	2202 Braden, Row 1, North	0.922	1.00
WH2096	2202 Braden, Row 1, South	1.210	1.16
WH2092	2202 Braden, Row 1, West (ORIG)	1.727	1.66
WH2093	2202 Braden, Row 1, West (QDU of WH2092)	1.443	1.41
WH2097	2202 Braden, Row 2, North	0.896	N/A
WH2099	2202 Braden, Row 2, South	0.710	N/A
WH2098	2202 Braden, Row 2, West	0.906	N/A
WH2295	2202 Braden, Row 3, North	0.300 U	N/A
WH2293	2202 Braden, Row 3, South	0.387	N/A
WH2294	2202 Braden, Row 3, West	0.300 U	N/A
WH2106	618 Alta Cove, Row 1, North	0.838	N/A
WH2107	618 Alta Cove, Row 1, South	1.206	0.78
WH2103	618 Alta Cove, Row 1, West (ORIG)	0.631	N/A
WH2104	618 Alta Cove, Row 1, West (QDU of WH2103)	0.629	N/A
WH2109	618 Alta Cove, Row 2, North	0.424	N/A
WH2110	618 Alta Cove, Row 2, South	0.430	N/A
WH2108	618 Alta Cove, Row 2, West	0.385	N/A
WH2111	620 Alta Cove, Row 1, North	0.382	N/A
WH2113	620 Alta Cove, Row 1, South	0.566	N/A
WH2112	620 Alta Cove, Row 1, West	0.482	N/A

U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair

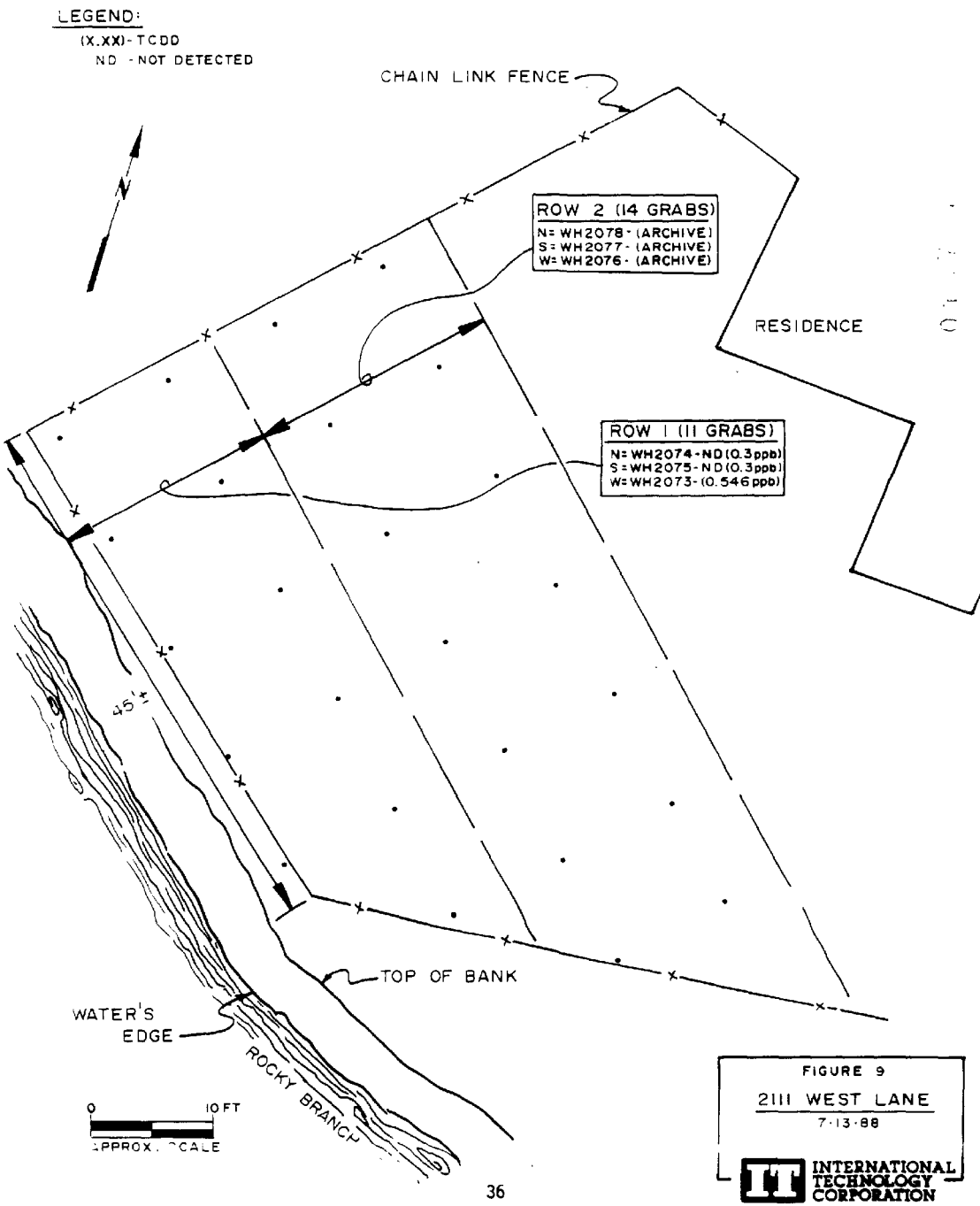


FIGURE 9

2111 WEST LANE

7-13-88

INTERNATIONAL TECHNOLOGY CORPORATION

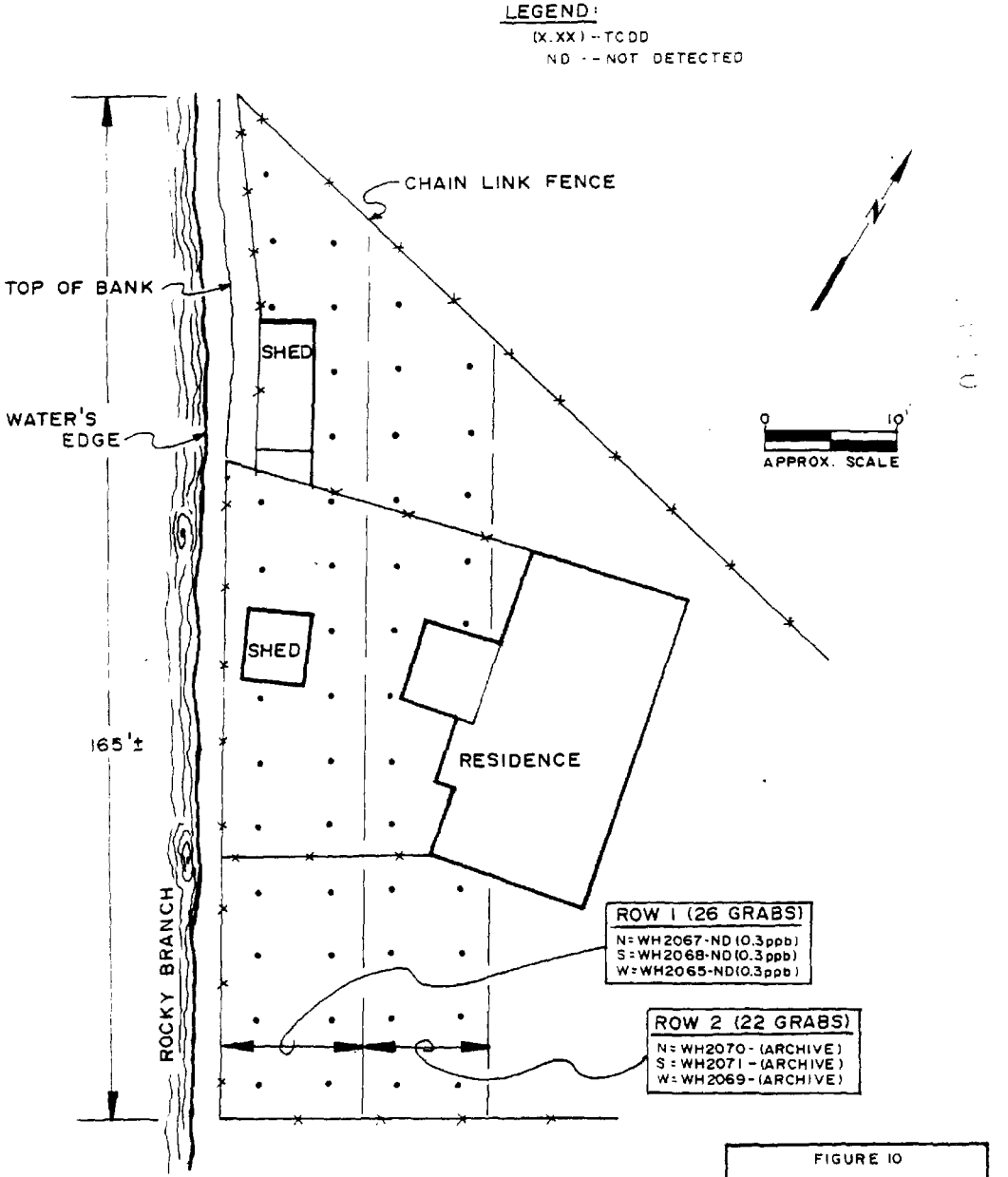


FIGURE 10

2113 WEST LANE

7-13-88

INTERNATIONAL TECHNOLOGY CORPORATION

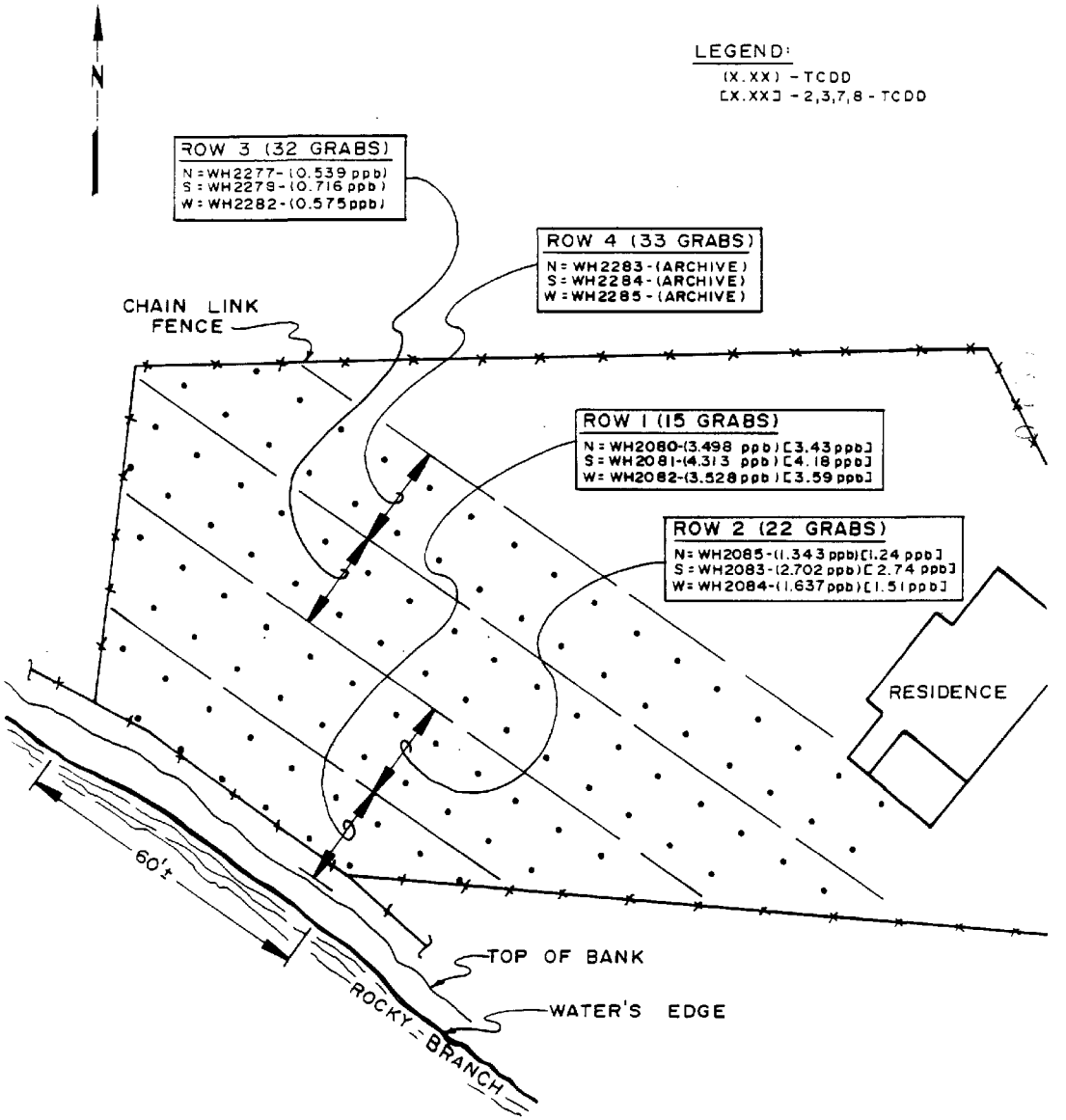


FIGURE 11

2112 WEST LANE

7-14-88 (ROWS 1,2)

7-26-88 (ROWS 3,4)

INTERNATIONAL TECHNOLOGY CORPORATION

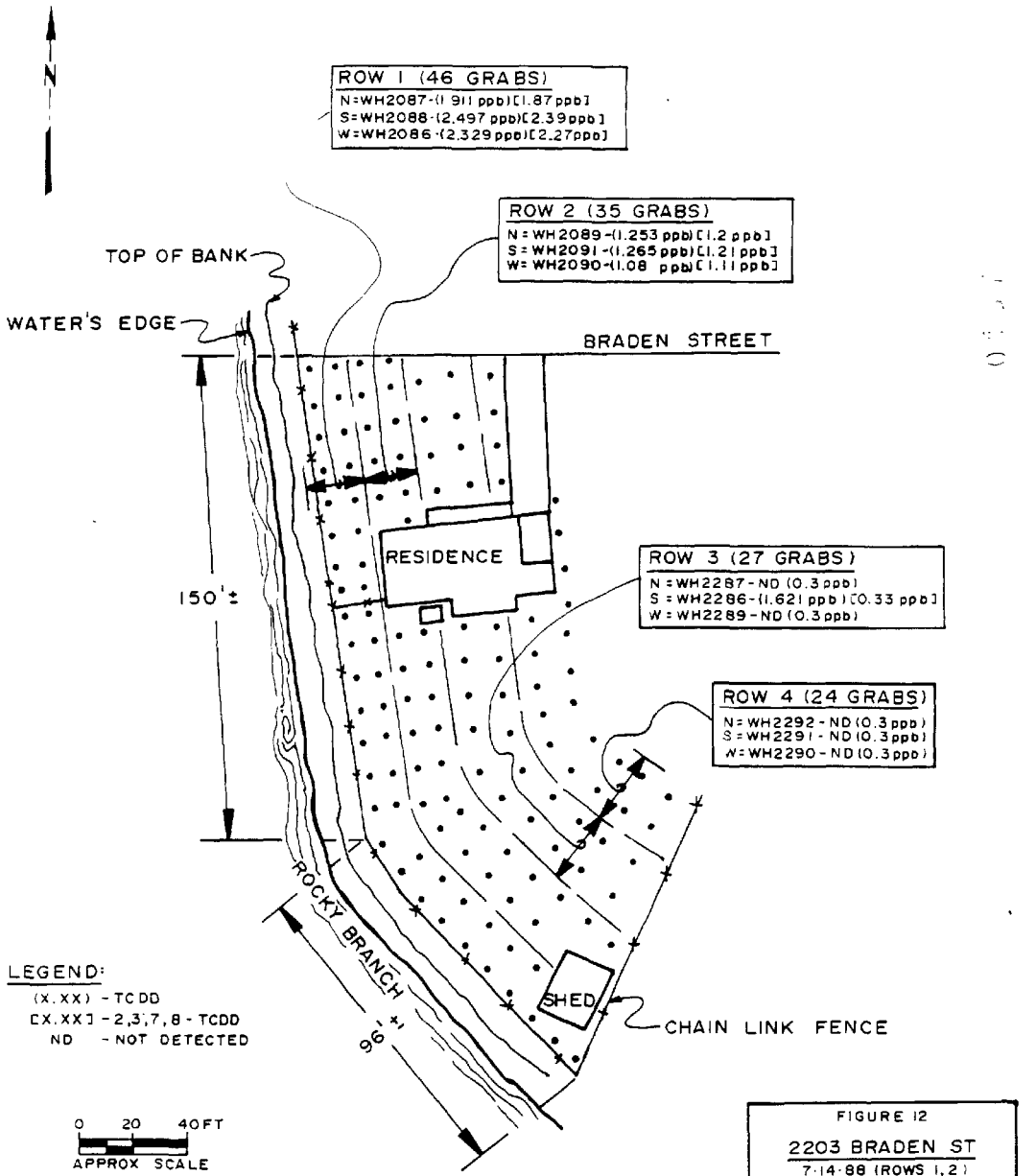


FIGURE 12

2203 BRADEN ST

7-14-88 (ROWS 1, 2)

7-26-88 (ROWS 3, 4)

INTERNATIONAL TECHNOLOGY CORPORATION

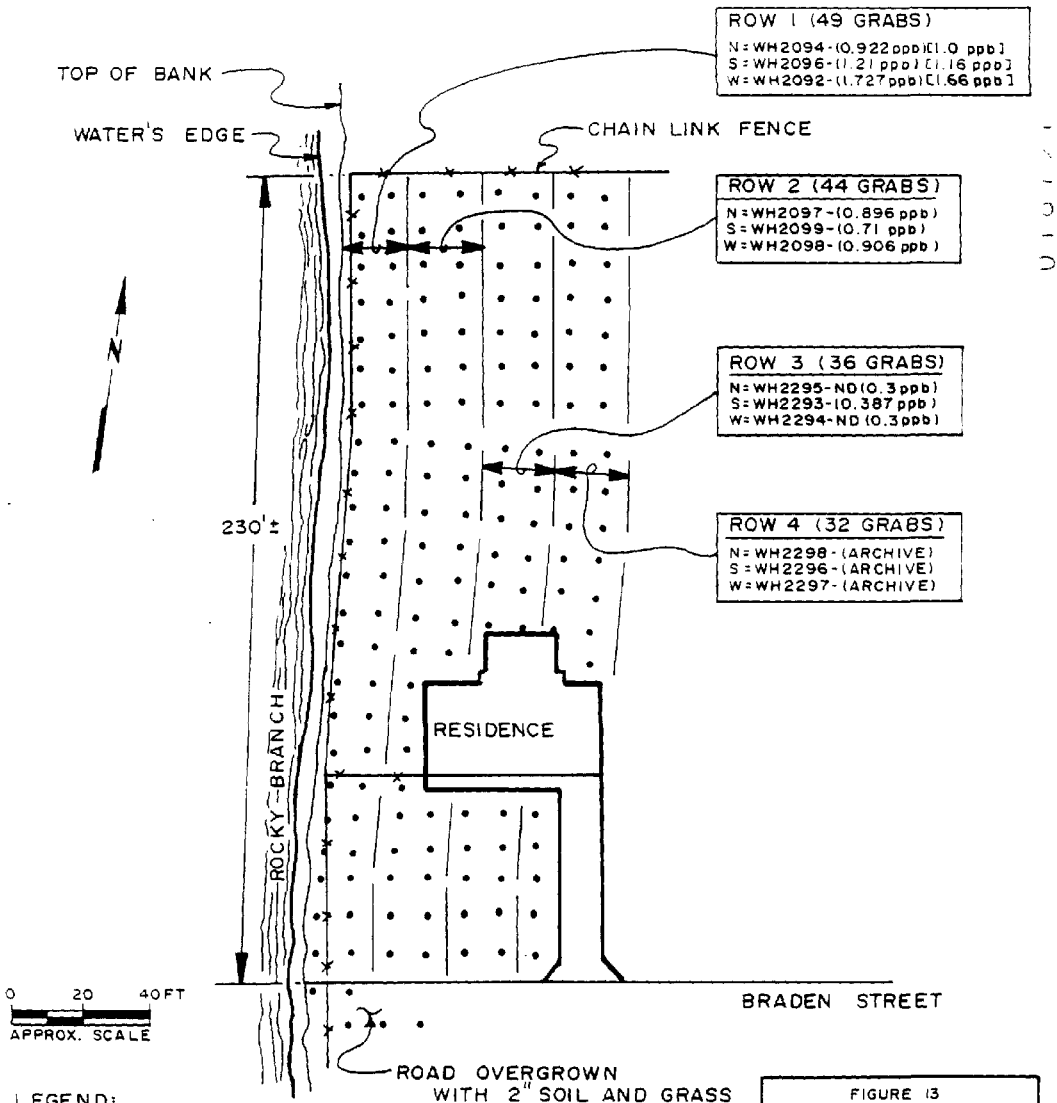


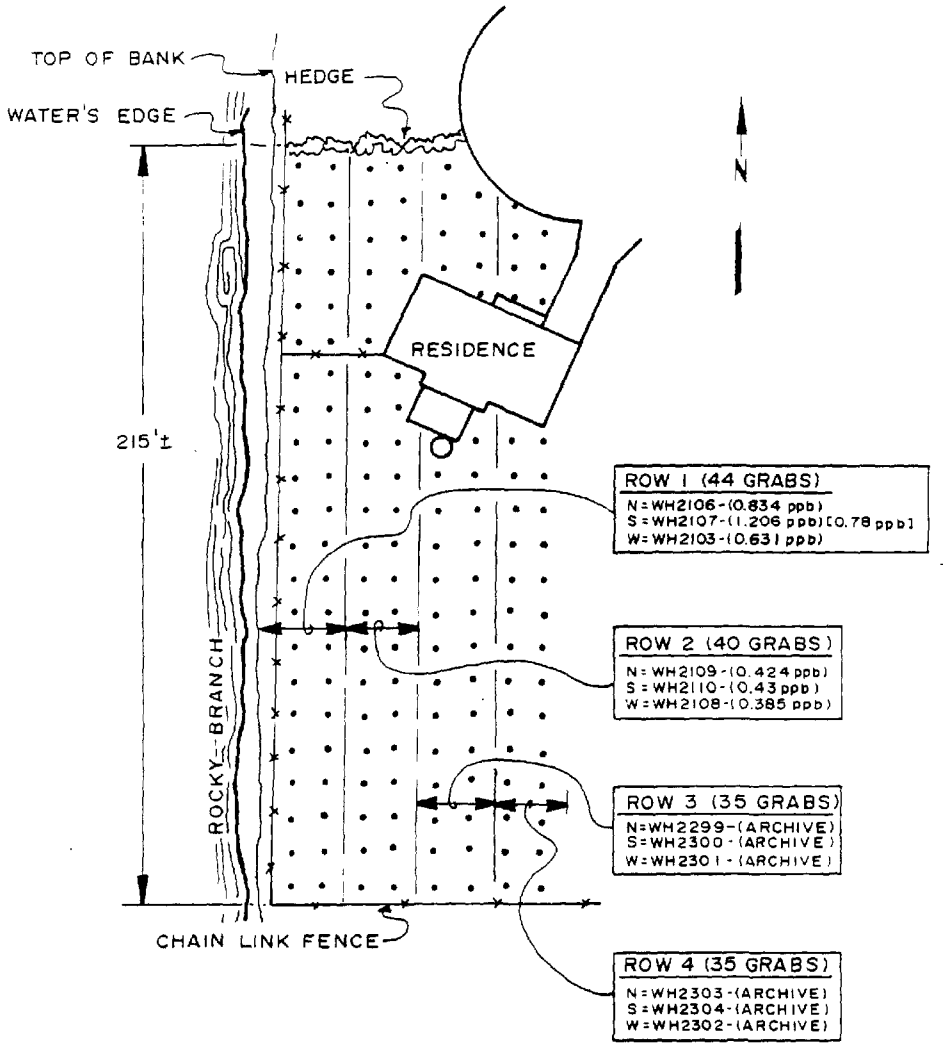
FIGURE 13

2202 BRADEN ST

7-14-88 (ROWS 1, 2)

7-26-88 (ROWS 3, 4)

INTERNATIONAL TECHNOLOGY CORPORATION



LEGEND:
(X.XX) – TCDD
[X.XX] – 2,3,7,8 TCDD

0 20 40FT
APPROX. SCALE

FIGURE 14
618 ALTA COVE
7-15-88 (ROWS 1, 2)
7-26-88 (ROWS 3,4)
INTERNATIONAL TECHNOLOGY CORPORATION

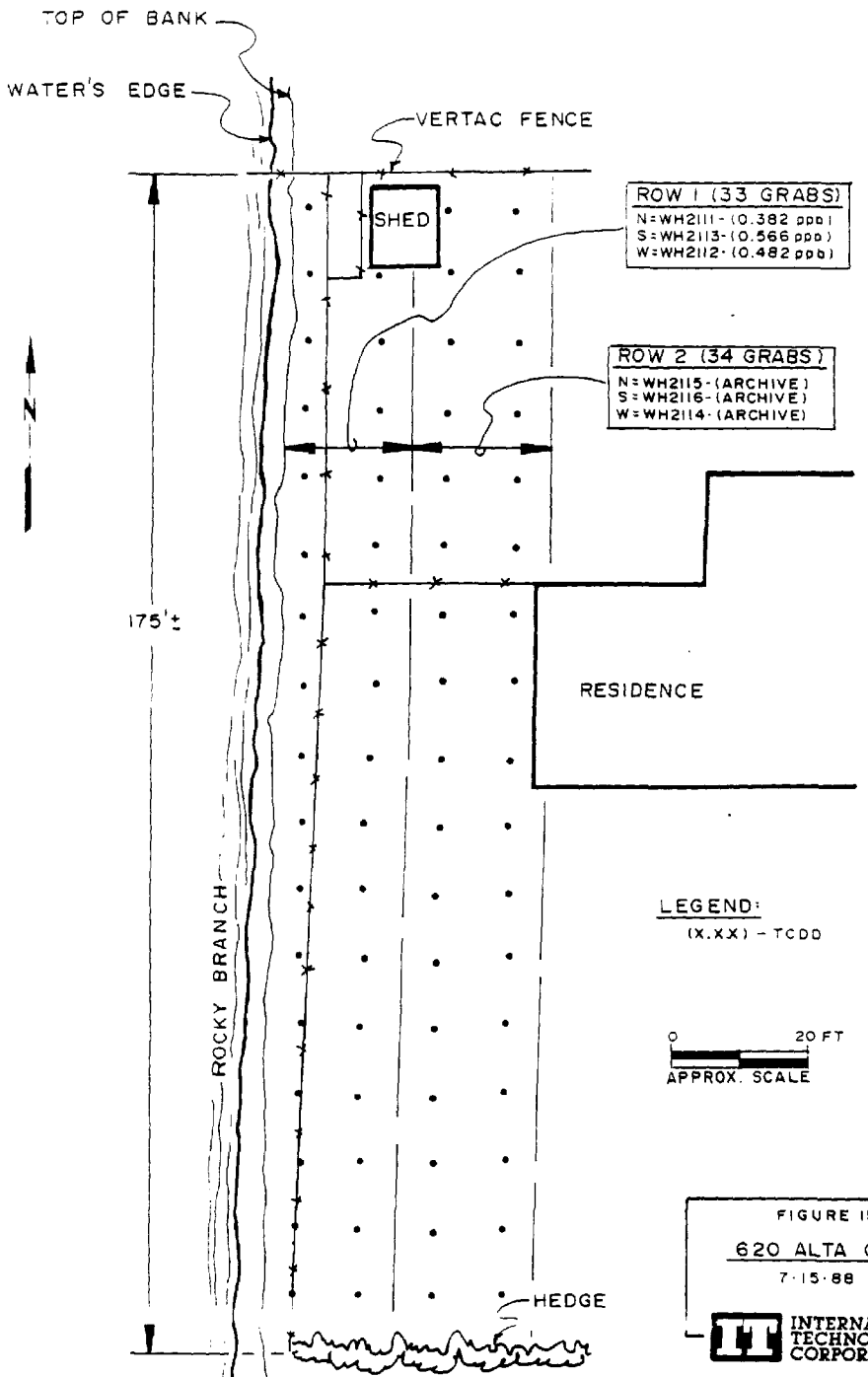


FIGURE 15

620 ALTA COVE

7-15-88

INTERNATIONAL TECHNOLOGY CORPORATION

TABLE 7

AREA C: "RESIDENTIAL" AREA ALONG EAST LEG OF ROCKY BRANCH CREEK
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2199	601 Brookhaven, Row 1, North	0.300 U	N/A
WH2198	601 Brookhaven, Row 1, South	0.300 U	N/A
WH2197	601 Brookhaven, Row 1, East	0.300 U	N/A
WH2190	605 Brookhaven, Row 1, North (ORIG)	0.300 U	N/A
WH2191	605 Brookhaven, Row 1, North (QDU of WH2190)	0.300 U	N/A
WH2193	605 Brookhaven, Row 1, South	0.300 U	N/A
WH2189	605 Brookhaven, Row 1, East	0.300 U	N/A
WH2184	609 Brookhaven, Row 1, North	0.300 U	N/A
WH2185	609 Brookhaven, Row 1, South	0.300 U	N/A
WH2183	609 Brookhaven, Row 1, East	0.300 U	N/A
WH2177	613 Brookhaven, Row 1, North	0.300 U	N/A
WH2178	613 Brookhaven, Row 1, South	0.300 U	N/A
WH2179	613 Brookhaven, Row 1, East	0.300 U	N/A
WH2170	617 Brookhaven, Row 1, North	0.300 U	N/A
WH2173	617 Brookhaven, Row 1, South	0.300 U	N/A
WH2169	617 Brookhaven, Row 1, East	0.300 U	N/A
WH2162	621 Brookhaven, Row 1, North	0.300 U	N/A
WH2164	621 Brookhaven, Row 1, South	0.300 U	N/A
WH2163	621 Brookhaven, Row 1, East	0.300 U	N/A
WH2150	625 Brookhaven, Row 1, North	0.300 U	N/A
WH2149	625 Brookhaven, Row 1, South (ORIG)	0.300 U	N/A
WH2156	625 Brookhaven, Row 1, South (QDU of WH2149)	0.300 U	N/A
WH2157	625 Brookhaven, Row 1, South (QDU of WH2156)	0.300 U	N/A
WH2151	625 Brookhaven, Row 1, East (ORIG)	0.300 U	N/A
WH2152A	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2153B	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2154C	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2155D	625 Brookhaven, Row 1, East (QDM of WH2151)	0.300 U	N/A
WH2158	625 Brookhaven, Row 1, East (QDU of WH2151)	0.300 U	N/A
WH2143	629 Brookhaven, Row 1, North	0.300 U	N/A
WH2146	629 Brookhaven, Row 1, South	0.300 U	N/A
WH2144	629 Brookhaven, Row 1, East	0.300 U	N/A
WH2138	1703 Hill, Row 1, North	0.300 U	N/A
WH2137	1703 Hill, Row 1, South	0.300 U	N/A
WH2139	1703 Hill, Row 1, East	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair
QDM - Composite mixture check

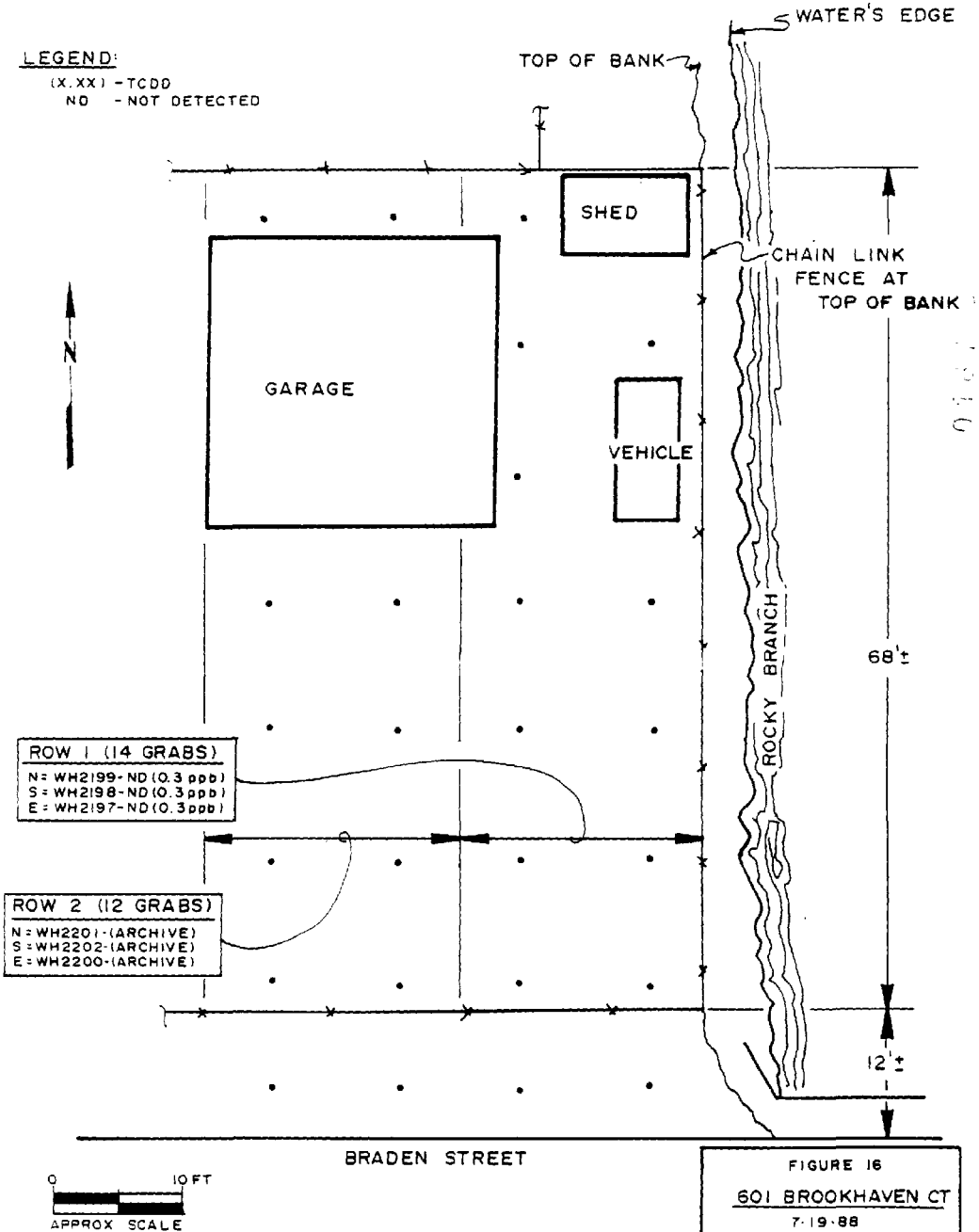


FIGURE 16

601 BROOKHAVEN CT

7-19-88

INTERNATIONAL TECHNOLOGY CORPORATION

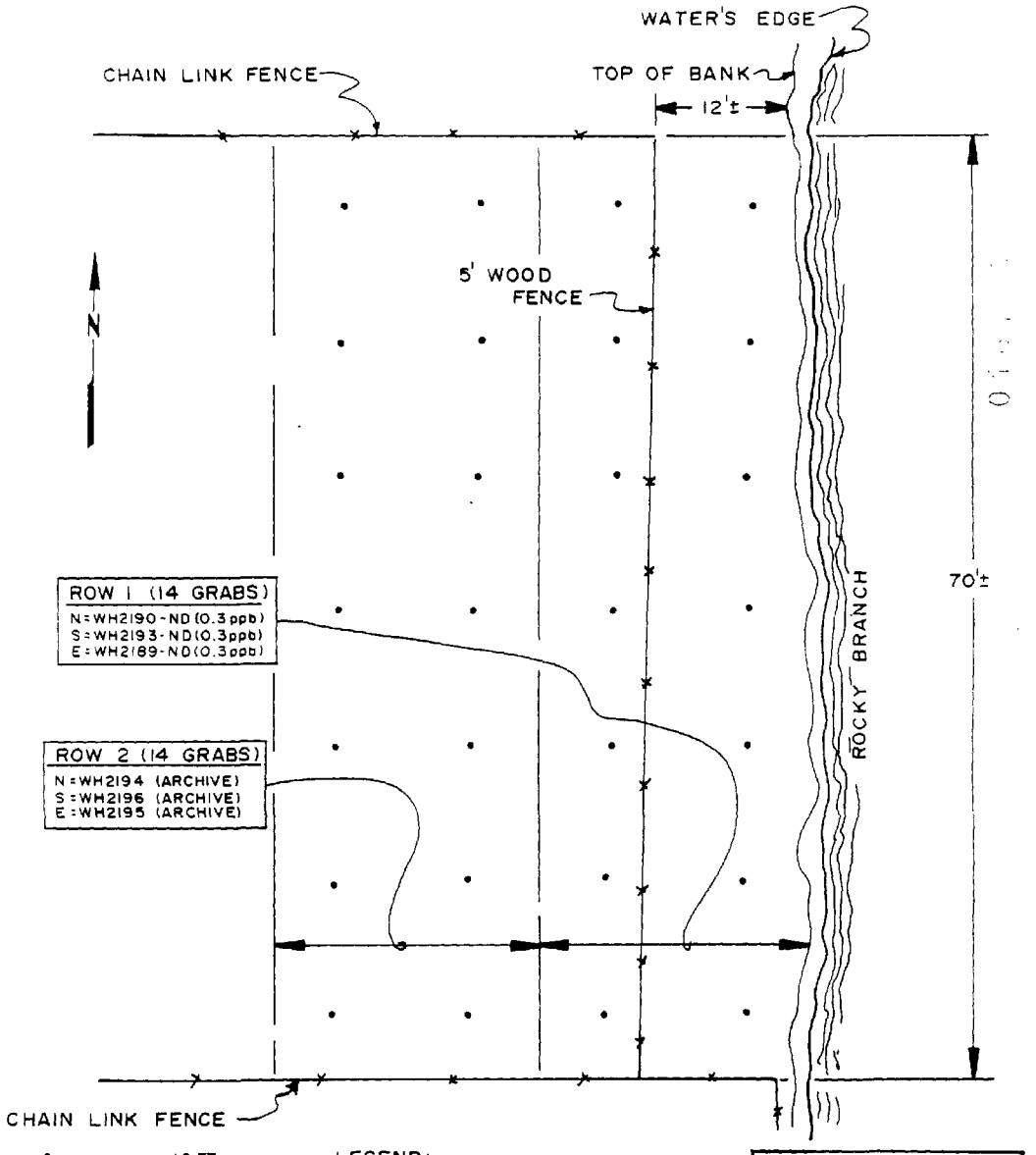


FIGURE 17

605 BROOKHAVEN CT

7-19-88

INTERNATIONAL TECHNOLOGY CORPORATION

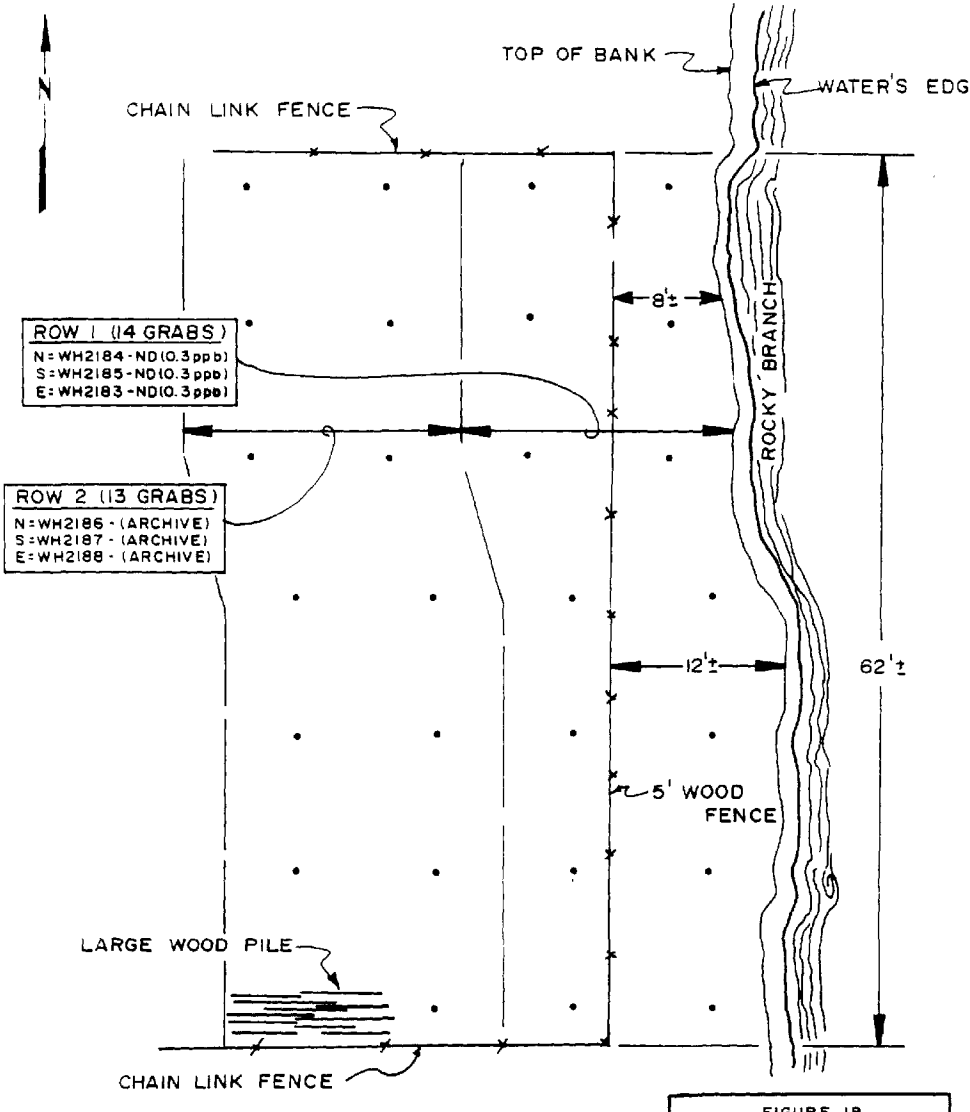


FIGURE 18

609 BROOKHAVEN CT

7-19-88

INTERNATIONAL TECHNOLOGY CORPORATION

018796 001

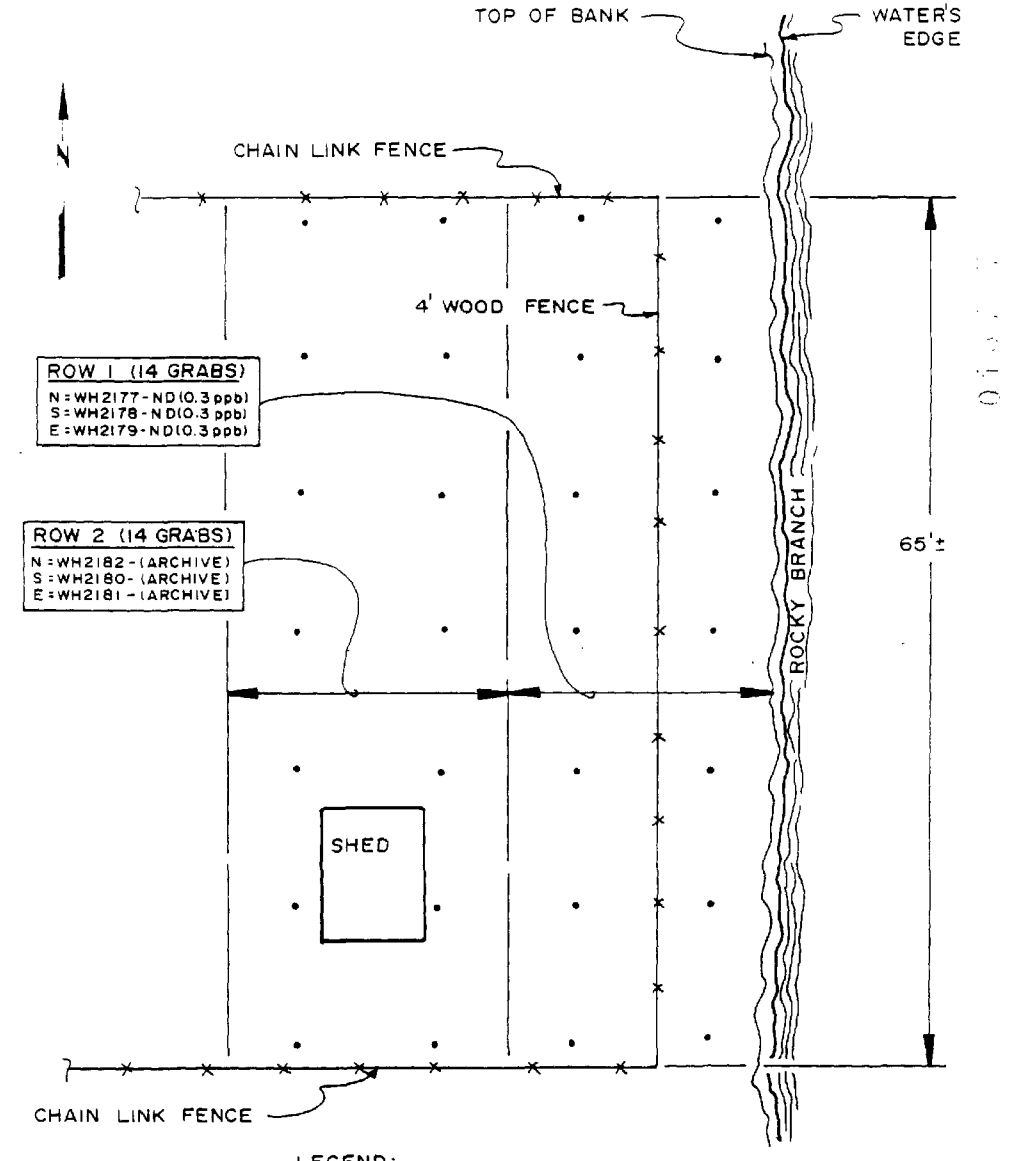
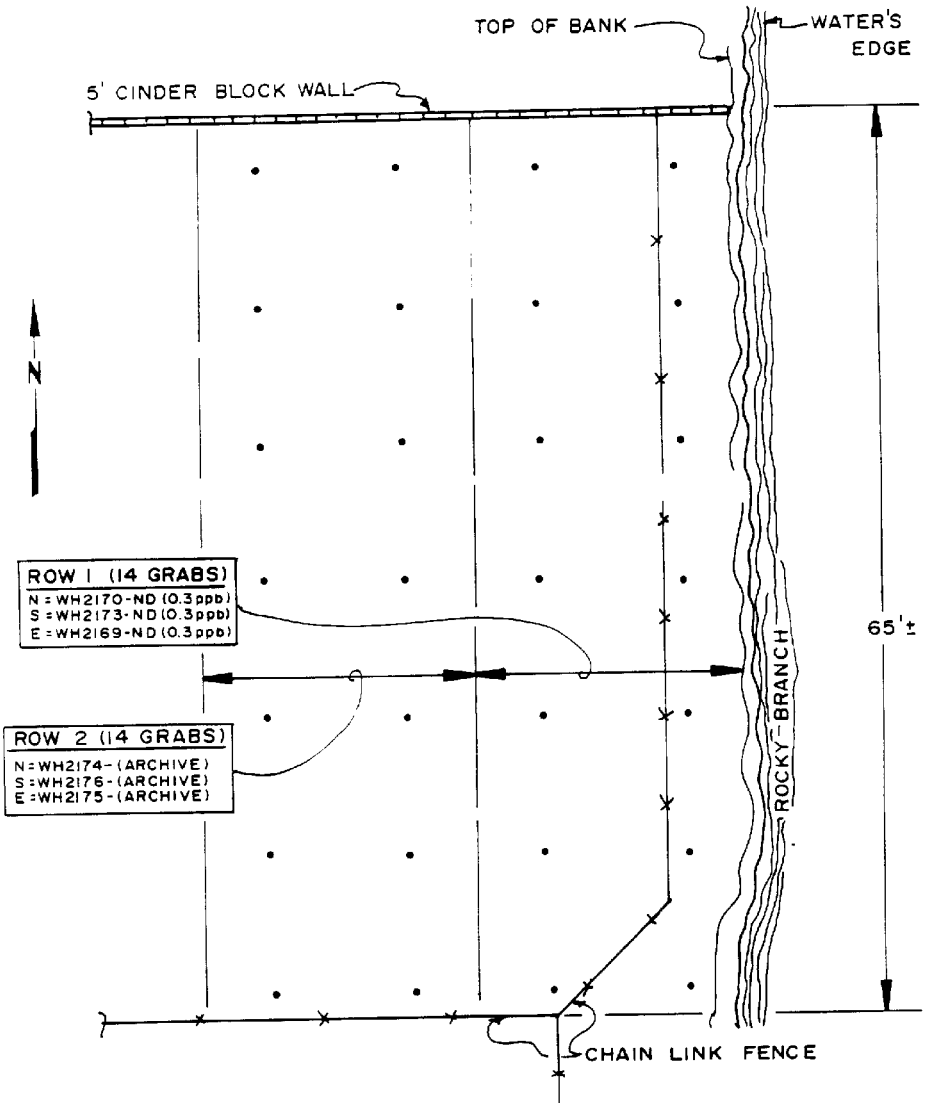


FIGURE 19
613 BROOKHAVEN CT
7-19-88

INTERNATIONAL TECHNOLOGY CORPORATION



0 10FT
APPROX. SCALE

LEGEND:
(X.XX) - TCDD
ND - NOT DETECTED

FIGURE 20
617 BROOKHAVEN CT
7-19-88

INTERNATIONAL TECHNOLOGY CORPORATION

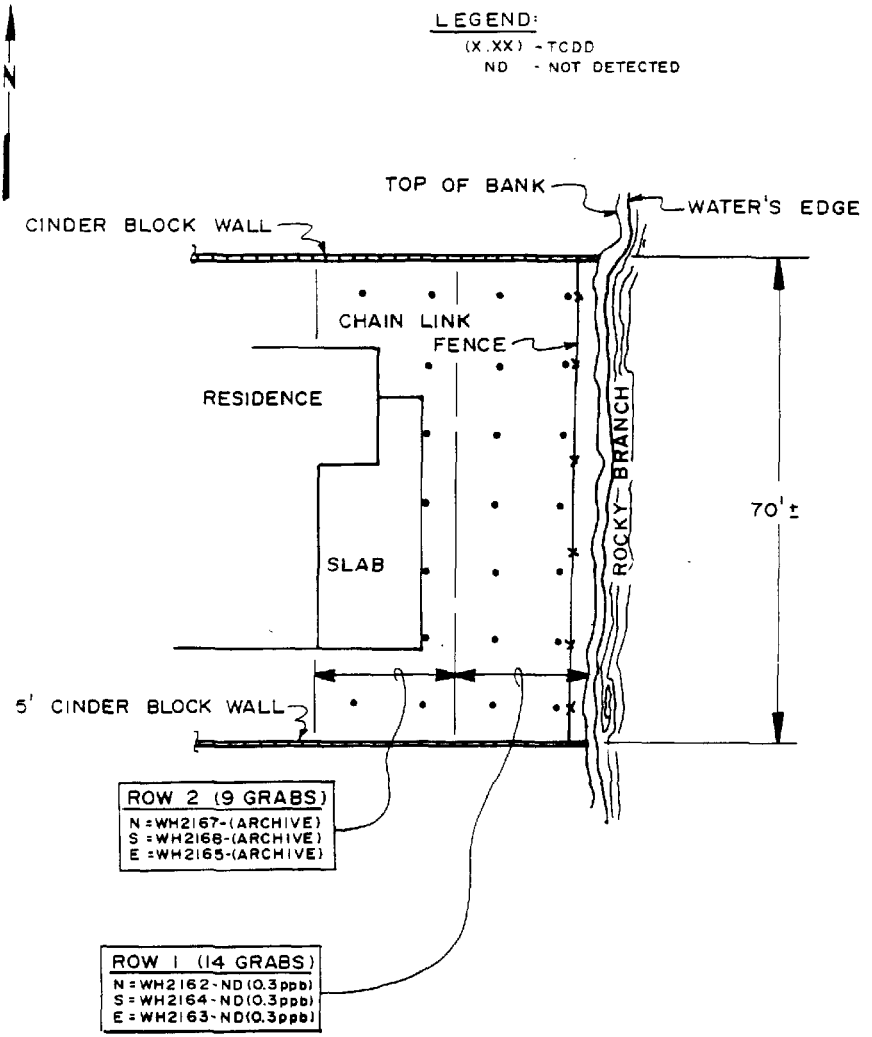
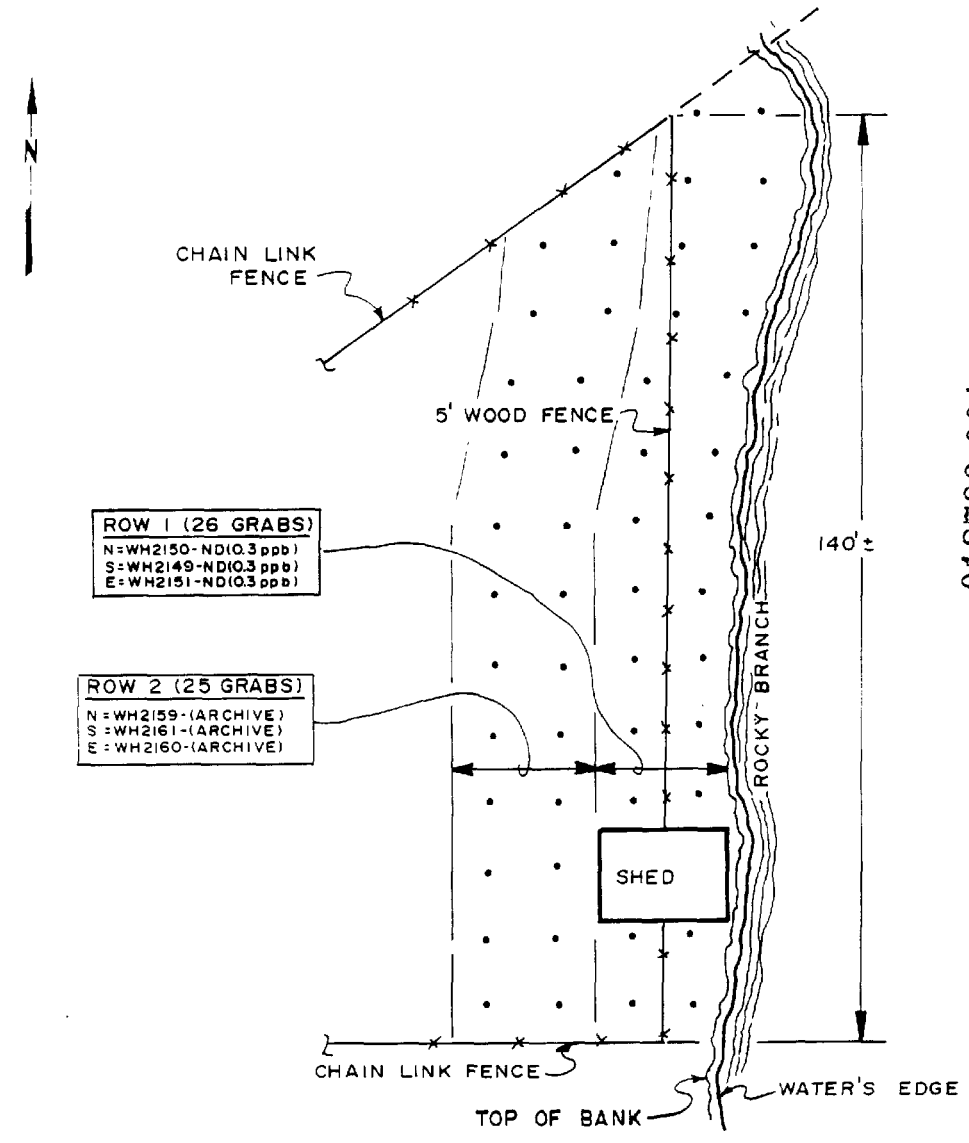


FIGURE 21

621 BROOKHAVEN CT

7-18-88

INTERNATIONAL TECHNOLOGY CORPORATION



018799 001

0 20 FT
APPROX. SCALE

LEGEND:
(X.XX) -TCDD
ND - NOT DETECTED

FIGURE 22
625 BROOKHAVEN CT
7-18-88
INTERNATIONAL TECHNOLOGY CORPORATION

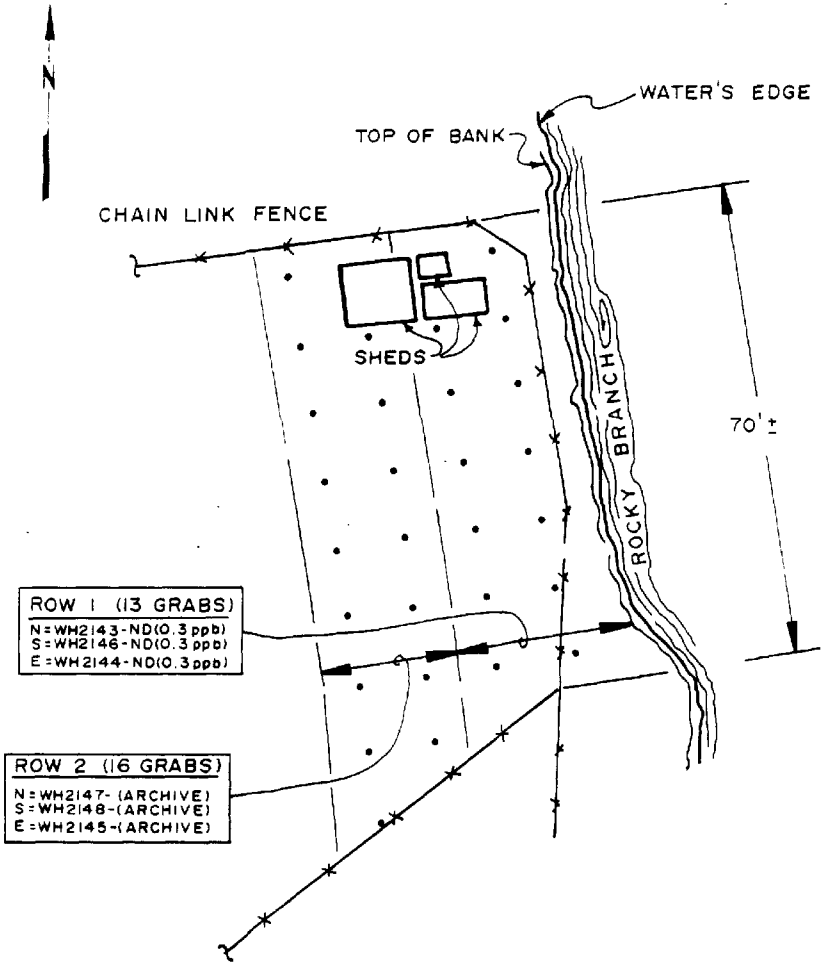


FIGURE 23

629 BROOKHAVEN CT

7-18-88

INTERNATIONAL TECHNOLOGY CORPORATION

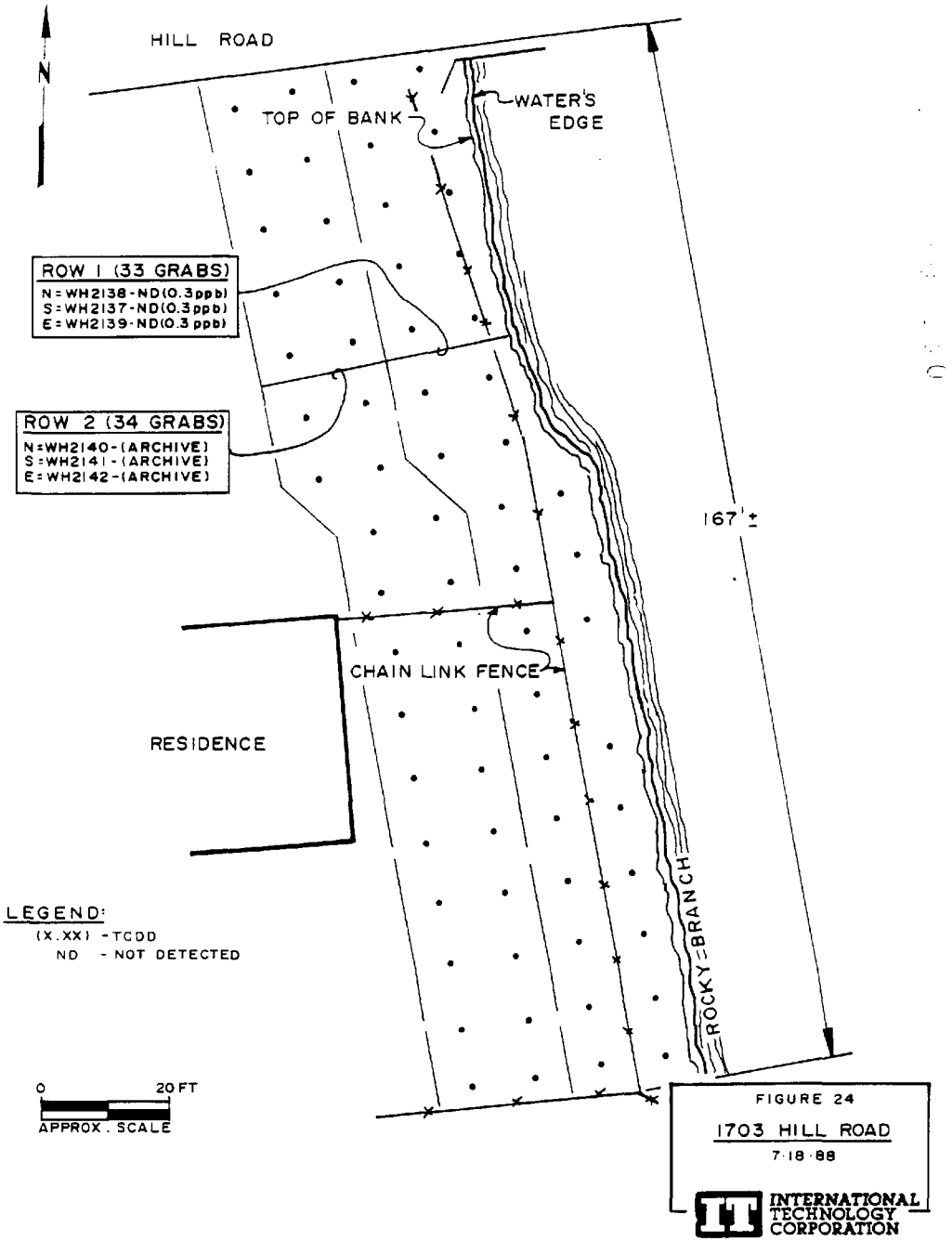


FIGURE 24

1703 HILL ROAD

7-18-88

INTERNATIONAL TECHNOLOGY CORPORATION

The property at 1704 Hill Road was included in the sampling plan as one of the residences adjacent to the east leg of Rocky Branch Creek. Located at 1704 Hill Road is manhole number 2745 which was also included in the sampling plan. The initial sampling at this location was done at: (1) two 20-foot wide grids (rows) adjacent to the creek running the north-south length of the property; and (2) a grid, which included a ditch, eastward from the manhole to the western edge of Row 2. Analytical results from the original grid for the manhole and for Rows 1 and 2 resulted in further sampling on this property (Table 8 and Figure 25).

The second phase of sampling done was to establish and sample Rows 3 and 4 in the yard and to establish and sample grids north and south of the original grid at manhole 2745. Analytical results obtained from this second sampling phase (Table 8 and Figure 25) led to more sampling at 1704 Hill Road and contiguous locations to better delineate the extent and degree of contamination.

The sections originally sampled as Rows 1 and 2, divided into segments north and south of the ditch, and a grid encompassing only the eastern part of the ditch extending from manhole number 2745 to Rocky Branch were sampled (Table 8 and Figure 26).

After examination of the land west and north of 1704 Hill Road and discussions between the EPA RPM and Hercules Incorporated, the section of the ditch west of the manhole and a low area on the Vertac plant property immediately north of the western end of the ditch were sampled (Table 8 and Figure 25).

Areas around other manholes which are part of the same sewage collection (interceptor) line as manhole number 2745 were also sampled. These manholes are number 1152, north of 1704 Hill Road and near Rocky Branch Creek; number 2741, located at 1712 Hill Road; and number 2740, located at 1804 Hill Road. In addition, a ditch at the northern edge of the 1712 and 1804 Hill Road properties was also sampled (Table 8; Figures 25 and 27).

TABLE 8

AREA C: 1704 HILL ROAD and GRIDS AT MANHOLE NUMBERS 2745, 1152, 2741 and 2740
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2125	1704 Hill, Row 1, North*	2.805	2.78
WH2123	1704 Hill, Row 1, South*	1.291	1.31
WH2124	1704 Hill, Row 1, East*	1.843	1.83
WH2325	1704 Hill, Row 1, 30 ft south of ditch to Hill road, North**	2.654	2.66
WH2322	1704 Hill, Row 1, 30 ft south of ditch to Hill road, South**	3.682	3.65
WH2321	1704 Hill, Row 1, 30 ft south of ditch to Hill road, West (ORIG)**	1.775	1.88
WH2324	1704 Hill, Row 1, 30 ft south of ditch to Hill road, West (QDU of WH2321)	2.388	2.30
WH2127	1704 Hill, Row 2, North*	2.094	2.08
WH2126	1704 Hill, Row 2, South*	3.871	5.97
WH2128	1704 Hill, Row 2, East*	3.139	4.61
WH2327	1704 Hill, Row 2, 30 ft south of ditch to Hill road, North**	5.985	5.76
WH2328	1704 Hill, Row 2, 30 ft south of ditch to Hill road, South**	11.397	12.32
WH2326	1704 Hill, Row 2, 30 ft south of ditch to Hill road, West**	10.427	10.92
WH2334	North of ditch, adjacent to Rocky Branch, North**	0.335	N/A
WH2336	North of ditch, adjacent to Rocky Branch, South**	0.334	N/A
WH2337	North of ditch, adjacent to Rocky Branch, West**	0.372	N/A
WH2305	1704 Hill, Row 3, North*	3.077	1.82
WH2306	1704 Hill, Row 3, South*	0.949	2.44
WH2307	1704 Hill, Row 3, East*	2.503	1.69
WH2309	1704 Hill, Row 4, North*	0.300 U	N/A
WH2310	1704 Hill, Row 4, South*	0.894	N/A
WH2308	1704 Hill, Row 4, East*	0.603	N/A
WH2120	Manhole #2745, 1704 Hill, South*	5.985	11.84
WH2121	Manhole #2745, 1704 Hill, West*	7.188	7.68
WH2122	Manhole #2745, 1704 Hill, East*	6.417	6.12
WH2333	80 ft east of Manhole #2745 to Rocky Branch, North**	4.997	4.80
WH2329	80 ft east of Manhole #2745 to Rocky Branch, South (ORIG)**	3.465	3.34
WH2332	80 ft east of Manhole #2745 to Rocky Branch, South (QDU of WH2329)	2.863	2.78
WH2330	80 ft east of Manhole #2745 to Rocky Branch, East**	3.232	3.19
WH2371	Ditch west from Manhole #2745*	41.012	54.73
WH2314	Manhole #2745, north of ditch, South (ORIG)*	2.849	3.09
WH2316	Manhole #2745, north of ditch, South (QDU of WH2314)	2.814	2.69
WH2318	Manhole #2745, north of ditch, West*	3.183	3.85
WH2317	Manhole #2745, north of ditch, East*	2.875	3.25
WH2313	Manhole #2745, 1704 Hill, south of ditch, North*	0.519	N/A
WH2311	Manhole #2745, 1704 Hill, south of ditch, West*	0.300 U	N/A
WH2312	Manhole #2745, 1704 Hill, south of ditch, East*	0.300 U	N/A
WH2354	Low area north of 1704 Hill pool, Northeast*	6.651	6.52
WH2355	Low area north of 1704 Hill pool, Northwest (ORIG)*	11.577	11.65
WH2357	Low area north of 1704 Hill pool, Northwest (QDU of WH2355)	5.128	5.10
WH2353	Low area north of 1704 Hill pool, Southwest*	6.939	7.16
WH2372	Manhole #1152, Northeast*	0.300 U	N/A
WH2374	Manhole #1152, Northwest*	0.300 U	N/A
WH2373	Manhole #1152, Southwest*	0.300 U	N/A
WH2360	Manhole #2741, 1712 Hill, South***	0.300 U	N/A
WH2359	Manhole #2741, 1712 Hill, West***	0.300 U	N/A
WH2358	Manhole #2741, 1712 Hill, East***	0.300 U	N/A
WH2362	Manhole #2740, 1804 Hill, South***	0.300 U	N/A
WH2363	Manhole #2740, 1804 Hill, West***	0.300 U	N/A
WH2365	Manhole #2740, 1804 Hill, East***	0.300 U	N/A
WH2366	Ditch in backyards of 1712 and 1804 Hill***	0.300 U	N/A

* - See Figure 25
** - See Figure 26
*** - See Figure 27

U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair

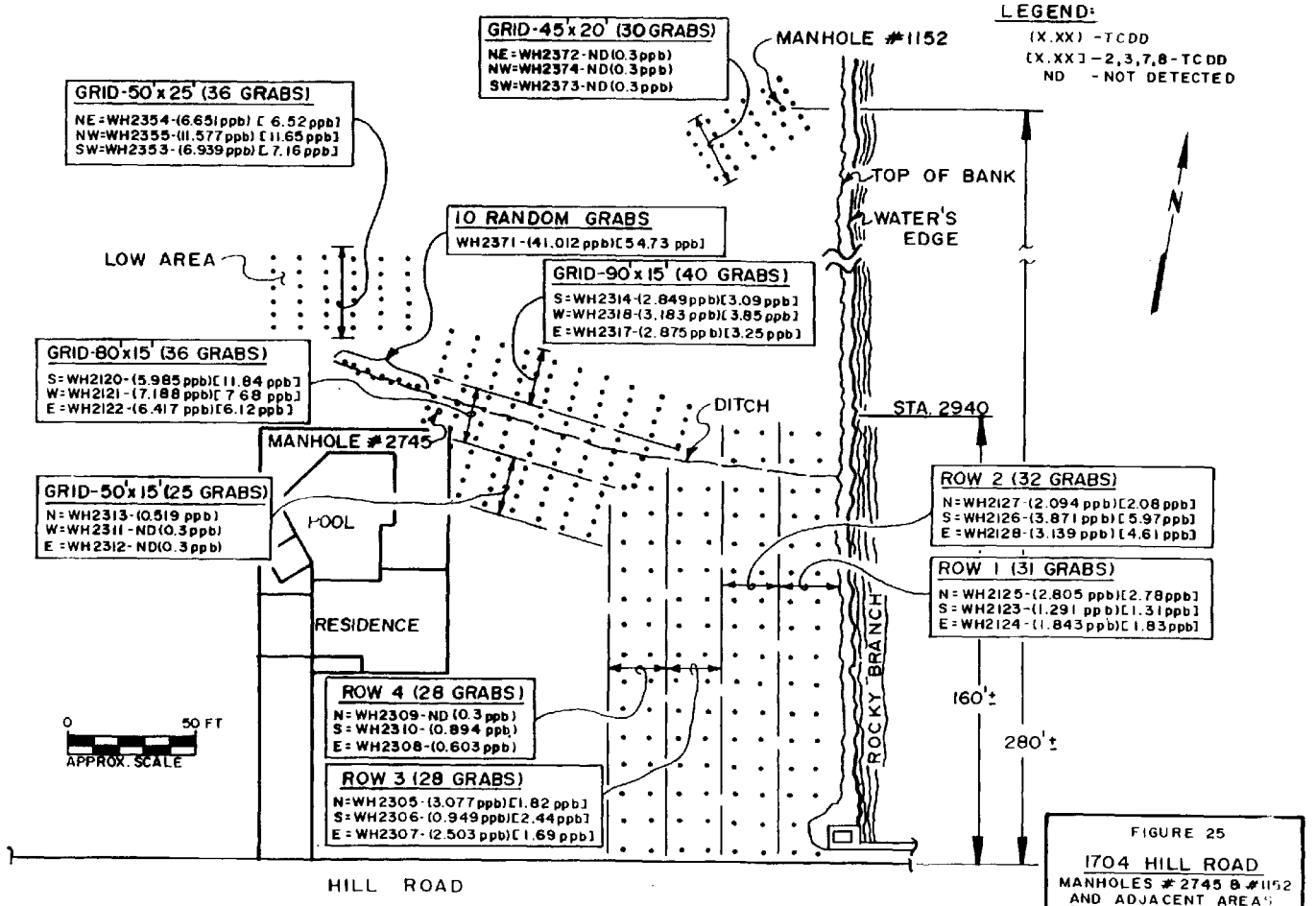


FIGURE 25

1704 HILL ROAD

MANHOLES #2745 & #1152 AND ADJACENT AREAS 7-16-88, 7-26-88, 8-11-88 & 8-12-88

INTERNATIONAL TECHNOLOGY CORPORATION

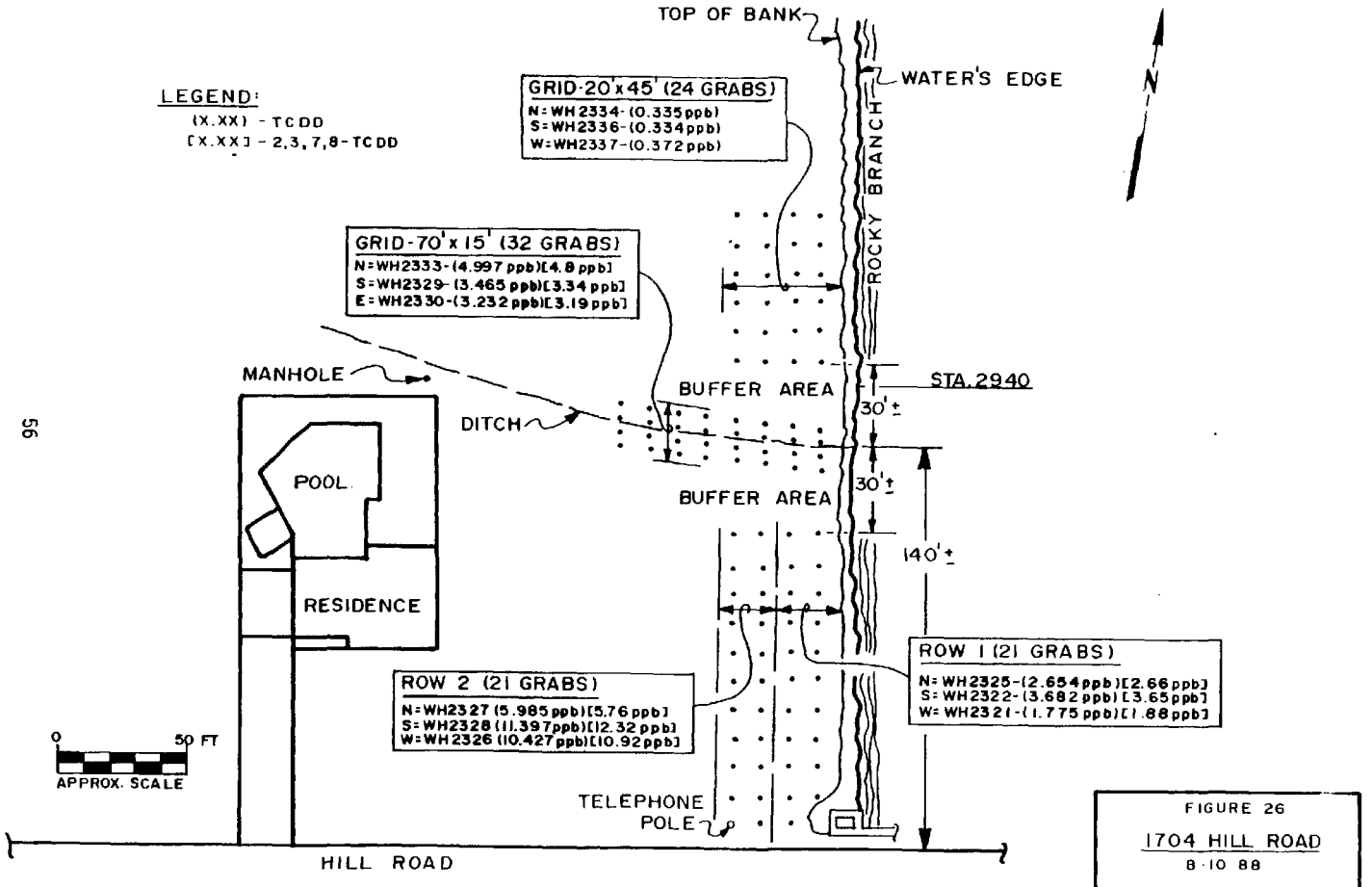


FIGURE 26

1704 HILL ROAD

8-10 88

INTERNATIONAL TECHNOLOGY CORPORATION

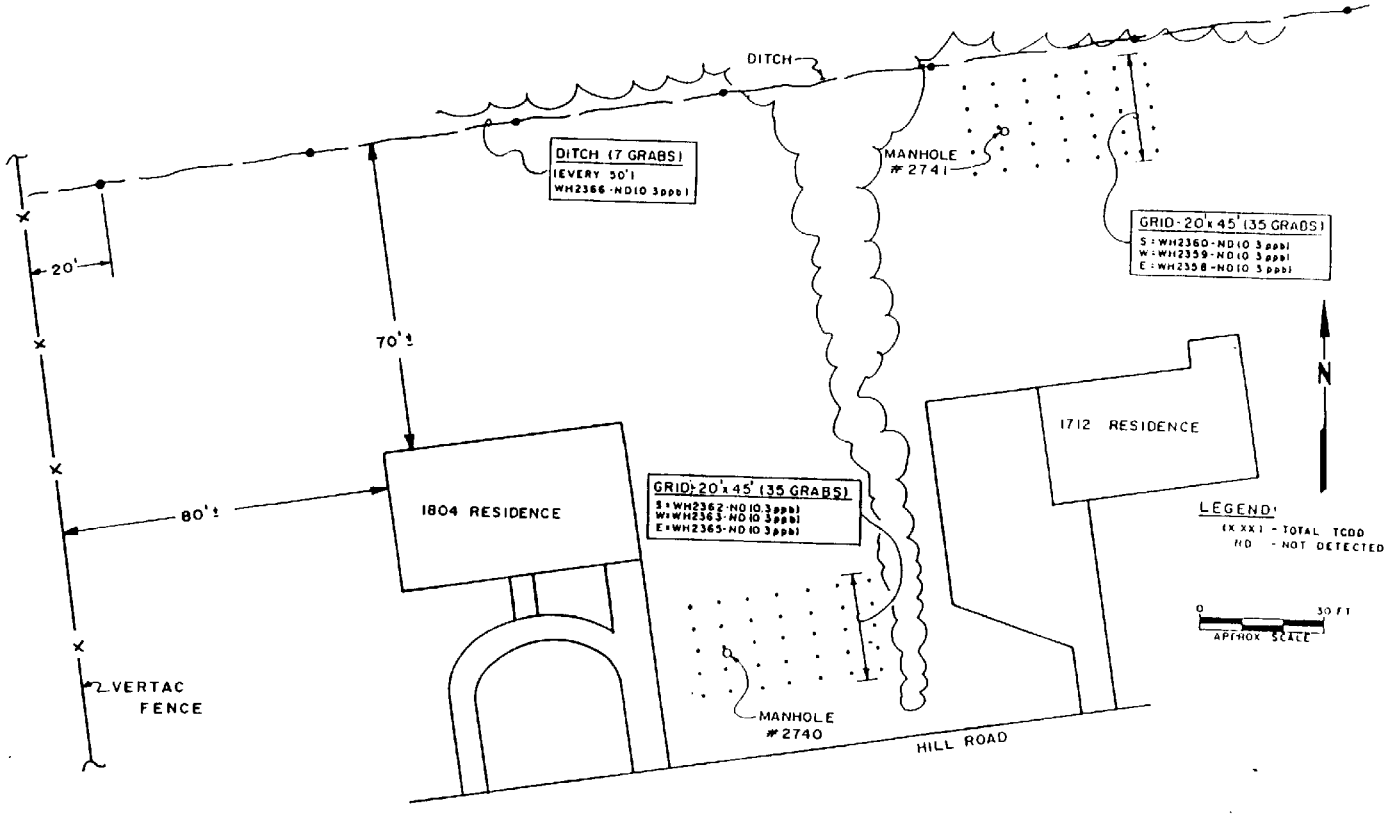


FIGURE 27

MANHOLES # 2740, 2741

& DITCH

1804 & 1712 HILL RD

INTERNATIONAL TECHNOLOGY CORPORATION

The results obtained from these sequential sampling efforts indicate that contamination on the 1704 Hill Road property and adjacent areas was confined to portions of the yard and the area of the ditch at the northern edge of the property and the low area on Vertac plant property. The concentrations of dioxin in the yard ranged from less than 0.300 ppb to 12 ppb; the western portion of the ditch contained 54 ppb.

The results of sampling of areas at 1712 and 1804 Hill Road indicated less than 0.300 ppb levels of dioxin.

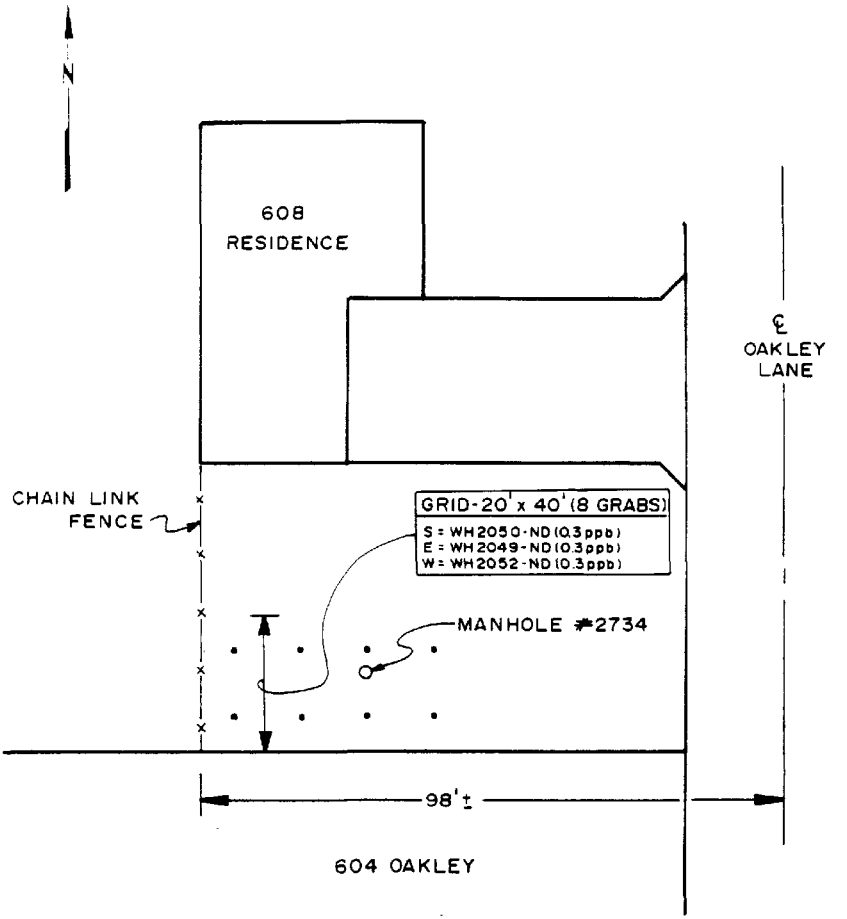
As required by the initial sampling plan, the manhole area surrounding manhole No. 2734 located in the side yard of 608 Oakley Lane (the address given in the plan, 612 Oakley, was shown to be incorrect by Jacksonville City Utility Maps) was sampled using a fine grid sampling strategy. In addition, manhole No. 2735 located in the backyard of 617 Oakley Lane was sampled using the fine grid strategy. This addition to the sampling plan was requested by the EPA RPM and agreed to by Hercules Incorporated. As shown in Table 9 and Figures 28 and 29, soil samples from the areas around the manholes contained less than 0.300 ppb TCDD.

TABLE 9

AREA C: GRIDS AT MANHOLE NUMBER 2734 and NUMBER 2735
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2050	Manhole Number 2734, 608 Oakley, South	0.300 U	N/A
WH2049	Manhole Number 2734, 608 Oakley, East	0.300 U	N/A
WH2052	Manhole Number 2734, 608 Oakley, West	0.300 U	N/A
WH2237	Manhole Number 2735, 617 Oakley, North	0.300 U	N/A
WH2238	Manhole Number 2735, 617 Oakley, South	0.300 U	N/A
WH2236	Manhole Number 2735, 617 Oakley, West	0.300 U	N/A

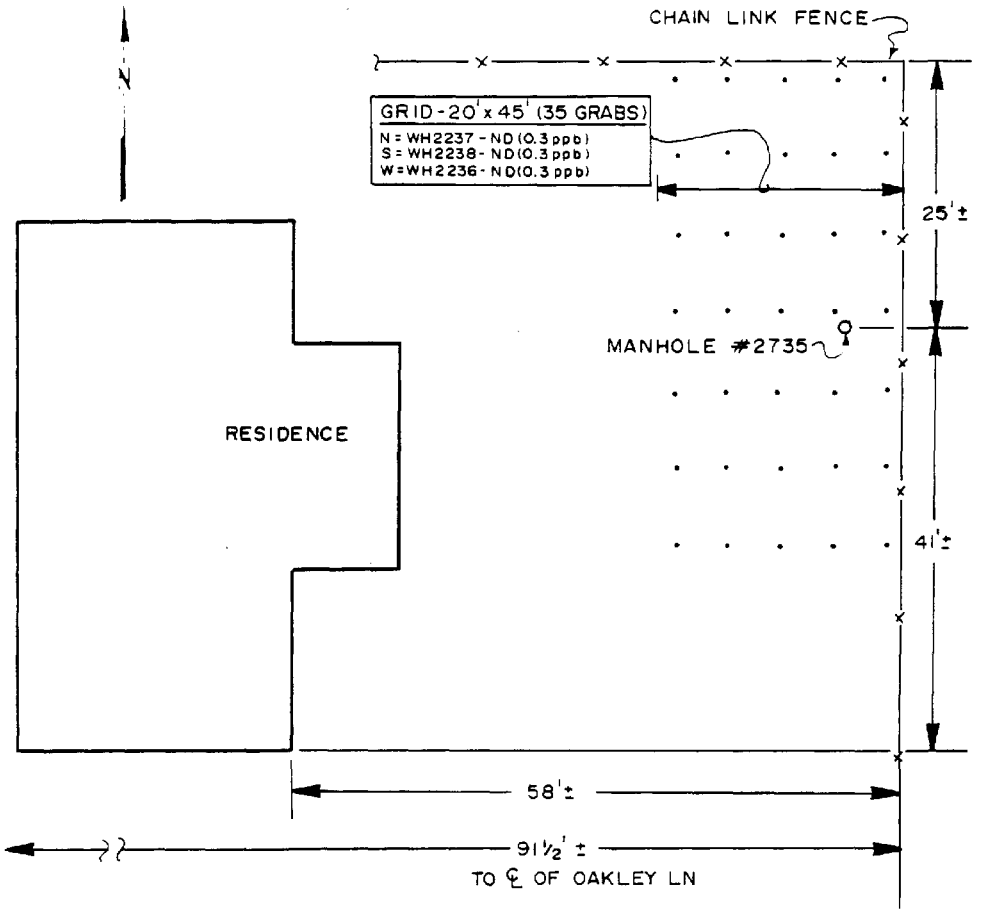
U - Not detected at stated concentration
N/A - Not applicable



0 20 FT
APPROX. SCALE

LEGEND:
(X.XX) - TCDD
ND - NOT DETECTED

FIGURE 28
MANHOLE #2734
608 OAKLEY LN
7-13-88
INTERNATIONAL TECHNOLOGY CORPORATION



LEGEND:

(X.XX) - TCDD

ND - NOT DETECTED

0 20 FT

APPROX SCALE

FIGURE 29

MANHOLE #2735

617 OAKLEY LN

7-23-88

INTERNATIONAL TECHNOLOGY CORPORATION

5.2.3 Area D: Gross Grid, Random Grab Samples

The entire residential area between the east and west legs of Rocky Branch Creek was divided into two large grids - east and west. Three grab (not composite) soil samples were collected in each grid. The sample locations were selected by a representative of the property owners based on suspected contamination, and were approved by the EPA RPM. Table 10 and Figure 30 present the sample locations and analytical results.

The EPA RPM and Hercules Incorporated also approved the sampling of a garden at 2113 Braden after the IT-FAS field effort had been completed. Hercules Incorporated was responsible for collection of this sample on September 7, 1988, in the presence of the EPA RPM. The composite sample, WH2383, was composed of six aliquots collected with a stainless steel spoon. The aliquots were taken from the garden area in the backyard of the residence. The sample was composited according to the routine procedure and submitted for analysis. Table 10 and Figure 30 also present the result for this sample. All field information and data for Area D samples are located in Table A-2, Appendix A.

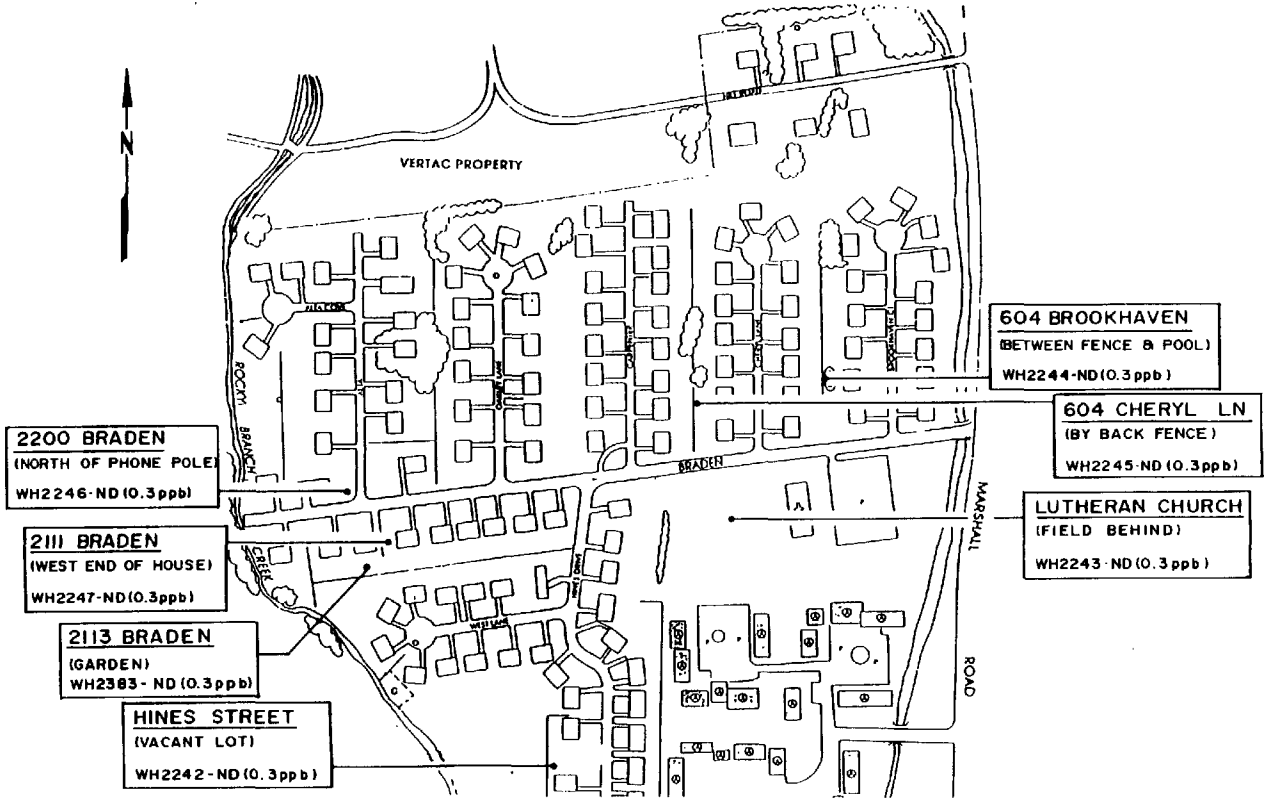
All samples from Area D contained less than 0.3 ppb TCDD.

TABLE 10

AREA D: "RESIDENTIAL" AREA GROSS GRID
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2244	604 Brookhaven; between backyard fence and pool	0.300 U	N/A
WH2245	604 Cheryl; by fence across backyard	0.300 U	N/A
WH2246	2200 Braden; 4 ft. north of telephone pole on corner	0.300 U	N/A
WH2247	2111 Braden; on west side of house between plants and house	0.300 U	N/A
WH2242	Vacant lot on Hines Street between 3010 and 3018 Hines	0.300 U	N/A
WH2243	Field behind church on Braden Street	0.300 U	N/A
WH2383	2113 Braden; in garden	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable



LEGEND:

(X.XX) - TCDD
ND - NOT DETECTED

FIGURE 30

AREA D

GROSS GRID

INTERNATIONAL TECHNOLOGY CORPORATION

5.3 AREAS E1/E2, F, G1/G2 and G3: OLD SEWAGE TREATMENT PLANT (STP)

The original sampling plans separated locations within or adjacent to the Old Sewage Treatment Plant (STP; West Wastewater Treatment Plant) into four major sampling areas: (1) Area E1/E2, the sludge drying beds and clarifier area; (2) Area F, the Aeration Basin; (3) Area G1/G2, the Oxidation Ponds; and (4) Area G3, the walls and bottom of the outfall ditch (channel). With the approval of the EPA RPM, sampling was not done in the outfall ditch (channel). Instead, a section of the Bayou Meto at the outfall channel was sampled; the section of the Bayou Meto became sampling Area G3. For clarity, the analytical results for soil and sediment samples collected from all areas associated with the STP are presented in Table 11. A description of each area is presented in following sections of this report along with figures for each major area.

5.3.1 Areas E1/E2: Sludge Drying Beds and Clarifier Area

The area defined in the sampling plan as the "old sewage treatment plant" was divided into two major areas for sampling: E1, the sludge drying beds and E2, the clarifier area. The sludge drying bed area was sampled using two fine grids: one inside the sludge beds and one outside the sludge beds (i.e., the perimeter around the beds). One composite sample was collected from each grid unit as required by the sampling plan. The grid dimensions, the number of sample aliquots and their locations were determined on-site by the EPA RPM. The clarifier area was considered one grid unit. One composite sample composed of a total of 39 aliquots was collected for analysis. The EPA RPM selected the sample aliquot locations at the time of sampling.

Sample aliquot locations and analytical results for these two areas are shown in Figure 31. (Complete descriptions of the samples are presented in Table A-2, Appendix A). Duplicate samples from the sludge drying beds contained 2.4 and 2.8 ppb 2,3,7,8-TCDD; a composite soil sample from the perimeter of the beds contained 1 ppb 2,3,7,8-TCDD. Soil from the clarifier area contained less than 0.5 ppb.

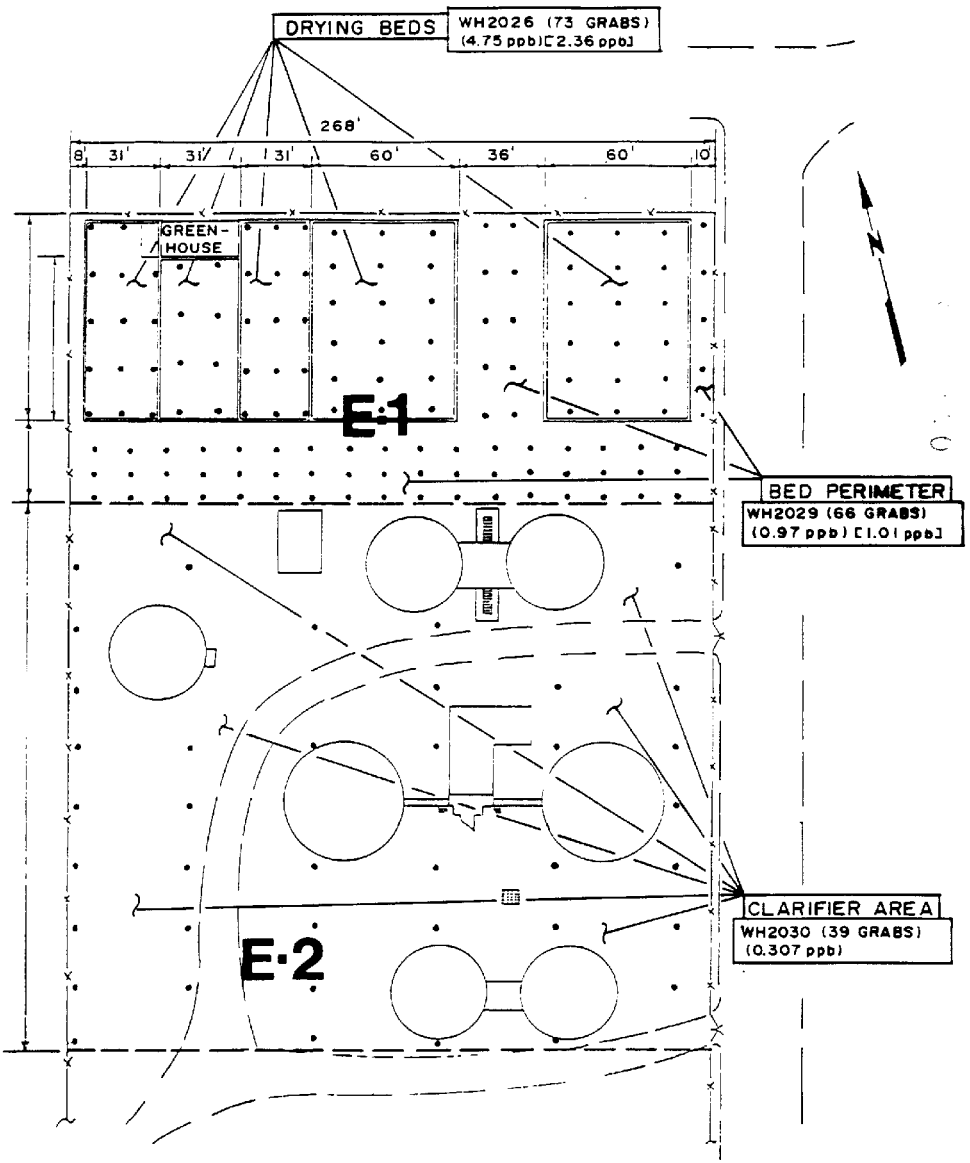
TABLE 11

AREAS E, F, and G: OLD SEWAGE TREATMENT PLANT (STP)
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL AND SEDIMENT SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
	Area E: Sludge Drying Beds/Clarifier Area*		
WH2026	Area E1: Sludge Drying Beds, Soil (ORIG)	4.750	2.36
WH2027	Area E1: Sludge Drying Beds, Soil (QDU of WH2026)	2.843	2.79
WH2029	Area E1: Perimeter of Sludge Drying Beds, Soil	0.970	1.01
WH2030	Area E2: Clarifier Area, Soil	0.307	N/A
	Area F: Aeration Basin**		
WH2135	Perimeter of Aeration Basin, Soil	0.300 U	N/A
WH2220	North Quad, Top Sludge	0.300 U	N/A
WH2227	North Quad, Interface with Bottom	0.300 U	N/A
WH2221	Northeast Quad, Top Sludge	2.705	1.41@
WH2228	Northeast Quad, Interface with Bottom	0.300 U	N/A
WH2224	Southwest Quad, Top Sludge	0.710	N/A
WH2232	Southwest Quadrant, Interface with Bottom	0.300 U	N/A
WH2222	South Quad, Top Sludge (ORIG)	2.840	2.83
WH2226	South Quad, Top Sludge (QDU of WH2222)	2.336	1.07
WH2229	South Quad, Interface with Bottom (ORIG)	0.300 U	N/A
WH2230	South Quad, Interface with Bottom (QDU of WH2229)	0.300 U	N/A
	Area G: Oxidation Ponds (Lagoons)***		
WH2134	Perimeter of Oxidation Ponds, Soil	0.300 U	N/A
	Area G1: North Oxidation Pond		
WH2206	West Half, Top Sludge	1.890	0.29
WH2207	West Half, Interface with Bottom	0.300 U	N/A
WH2208	East Half, Top Sludge	1.702	0.97
WH2209	East Half, Interface with Bottom (ORIG)	0.300 U	N/A
WH2210	East Half, Interface with Bottom (QDU of WH2209)	0.300 U	N/A
	Area G2: South Oxidation Pond		
WH2213	West Half, Top Sludge	0.300 U	N/A
WH2212	West Half, Interface with Bottom	0.300 U	N/A
WH2215	East Half, Top Sludge	0.300 U	N/A
WH2214	East Half, Interface with Bottom	0.300 U	N/A
	Area G3: Bayou Meto at Outfall of South Oxidation Pond		
WH2340	Delta at Outfall, Sediment (ORIG)	0.300 U	N/A
WH2341	Delta at Outfall, Sediment (QDU of WH2340)	0.300 U	N/A
WH2345	Bayou Meto, right bank, 6 inches#, Soil (ORIG)	0.300 U	N/A
WH2347	Bayou Meto, right bank, 6 inches#, Soil (QDU of WH2345)	0.300 U	N/A
WH2344	Bayou Meto, right bank, 36 inches#, Soil	0.300 U	N/A
WH2343	Bayou Meto, right bank, 60 inches#, Soil	0.300 U	N/A
WH2352	Bayou Meto, left bank, 6 inches#, Soil	0.300 U	N/A
WH2349	Bayou Meto, left bank, 36 inches#, Soil (ORIG)	0.300 U	N/A
WH2351	Bayou Meto, left bank, 36 inches#, Soil (QDU of WH2349)	0.300 U	N/A
WH2348	Bayou Meto, left bank, 60 inches#, Soil	0.300 U	N/A

* - See Figure 31
** - See Figure 32
*** - See Figure 33

@ - Non-2,3,7,8 isomers present
# - Distance from edge of water
U - Not detected at stated concentration
N/A - Not applicable
ORIG - Original sample of quality control pair
QDU - Duplicate sample of quality control pair



LEGEND:

(X.XX) - TCDD

[X.XX] - 2,3,7,8- TCDD

0 40 FT

APPROX. SCALE

FIGURE 31

AREAS E-1 & E-2

OLD SEWAGE TREATMENT PLANT SLUDGE DRYING BEDS & CLARIFIER AREA

IT INTERNATIONAL TECHNOLOGY CORPORATION

5.3.2 Area F: Aeration Basin

One soil composite sample was collected around the perimeter of the aeration basin. The aliquots (grabs) for the composite were collected every 20 feet on the dike surrounding the basin, five feet from the edge of the water (see Figure 32).

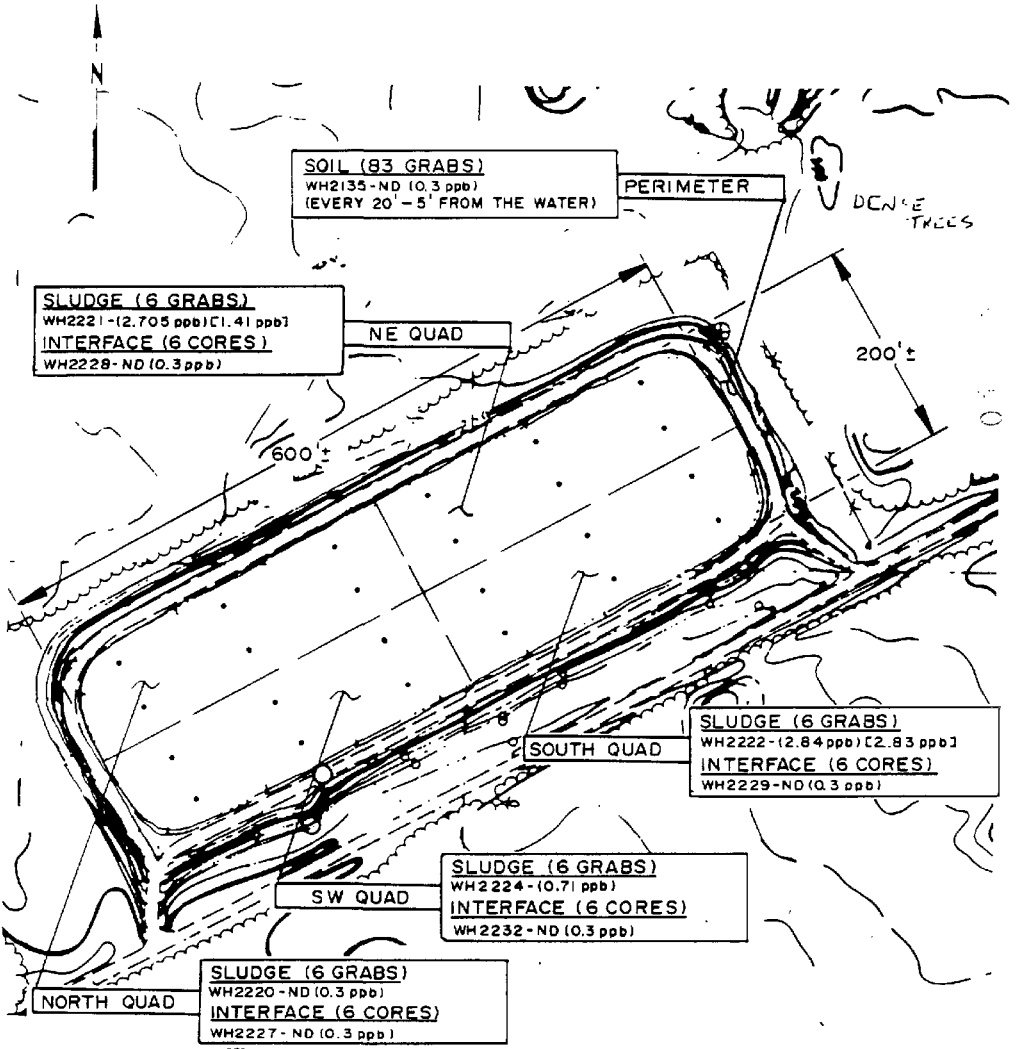
The sediment samples from within the basin were collected in a manner deviating slightly from the sampling plan. The deviation was documented and approved by the EPA RPM in a correspondence from the RPM to Hercules Incorporated. The deviation was that the basin was divided into four equal quadrants instead of three sections. Two composite samples were collected in each quadrant, one from the top sediment (or sludge) and one from the interface between the bottom sediment and clay bottom of the basin. Each composite sample was composed of six aliquots. The procedures used to collect the aliquots are described in Sections 3.2.1 and 3.2.2. The aliquot collection locations were determined by the EPA RPM and are presented along with the analytical results in Figure 32 and Table 11 (also see Table A-2, Appendix A).

All samples taken from the aeration basin contained less than 0.300 ppb TCDD except the top sludge samples of the northeast, southwest and south quadrants. The maximum concentration of 2,3,7,8-TCDD found was 2.8 ppb.

5.3.3 Areas G1/G2: Oxidation Ponds

The north oxidation pond was identified as area G1, the south oxidation pond as area G2. One soil composite sample was collected around the perimeter of both ponds not including the dike separating the two. An aliquot was collected every 100 feet at a location five feet from the water's edge. This was a slight deviation from the plan and was approved by the EPA RPM and documented in the field logbook.

For sediment sampling, each pond was divided into two equal grids - east and west. Two composite samples, consisting of four aliquots each, were collected in each grid: the top sediment or sludge and the bottom sediment/clay interface. Sample collection procedures are described in Sections 3.2.1 and 3.2.2. The aliquot collection locations were determined on site by the EPA RPM. See Figure 33 and Table 11 for sample locations and analytical results (also see



0 100 FT
APPROX. SCALE

LEGEND:
(X.XX) - TCDD
[X.XX] - 2,3,7,8-TCDD
ND - NOT DETECTED

FIGURE 32
AREA F
AERATION BASIN
(OF STP)

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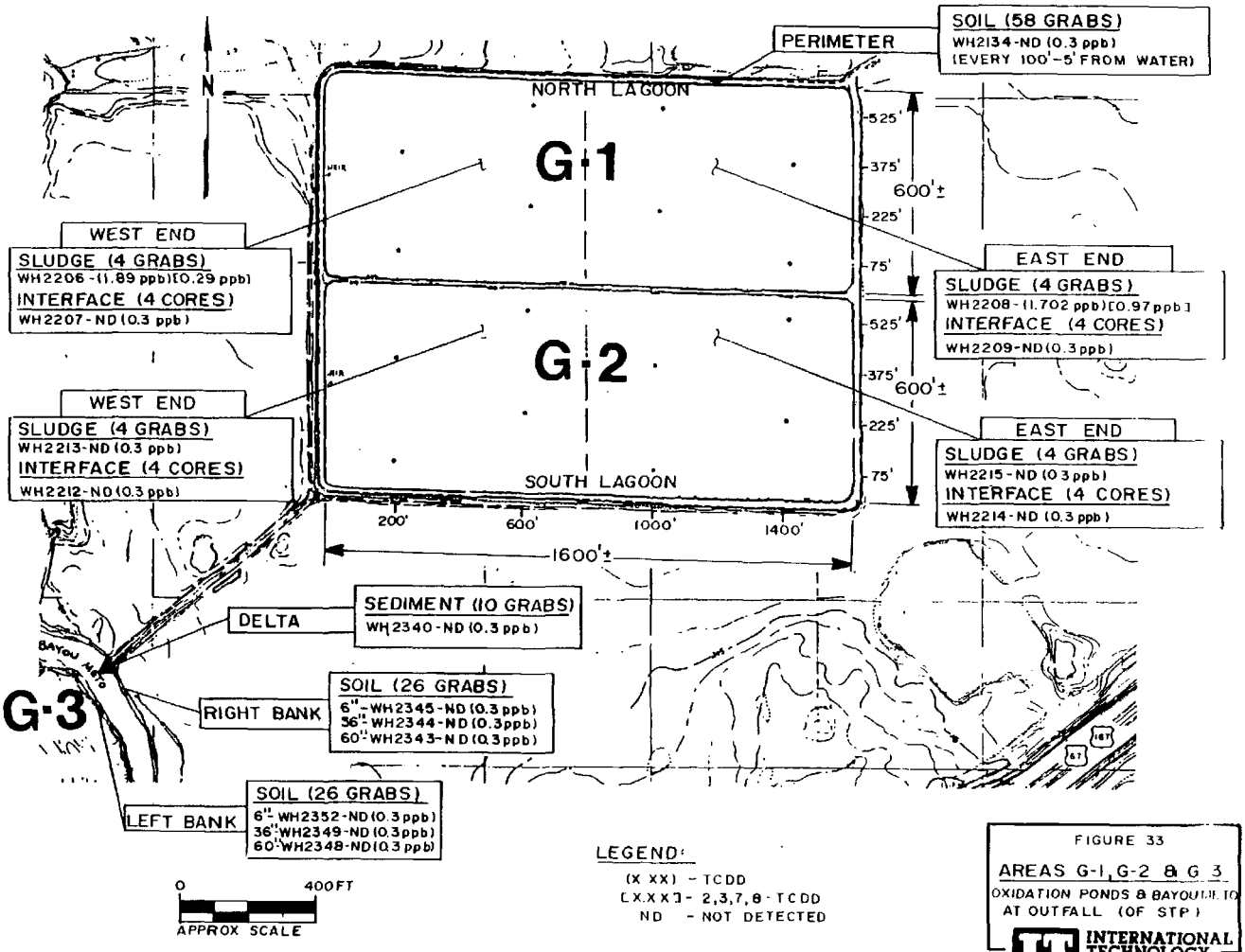


FIGURE 33

AREAS G-1, G-2 & G-3

OXIDATION PONDS & BAYOU LAFOURCHE OUTFALL (OF STP)

INTERNATIONAL TECHNOLOGY CORPORATION

Table A-2, Appendix A). All samples from the oxidation ponds contained less than 1 ppb 2,3,7,8-TCDD.

5.3.4 Area G3: Bayou Meto at the STP Outfall

As mentioned above, deviation from the sampling plan concerning the STP outfall area was approved by the EPA RPM due to conditions on-site. Instead of sampling the outfall channel bank and bottom, the delta created in the Bayou Meto by the outfall effluent was sampled, and the right and left banks of the Bayou Meto at its confluence with the outfall channel were sampled.

Ten points in the delta area were selected at random and equal aliquots of sediment were collected using stainless steel spoons. The sampling area was wet, but not under water. The ten aliquots were composited for analysis.

Starting at the upstream edge of the delta (the same as the downstream corner of the confluence with the outfall) and extending 250 feet downstream, the right and left banks of the Bayou Meto were sampled. Three composite soil samples were collected on each bank: 6 inches, 36 inches and 60 inches distance from the edge of the water. The sample aliquots were ten feet apart for a total of 26 aliquots for each composite sample. The sample results are presented in Table 11 and Figure 33 (see also Table A-2, Appendix A). All samples collected from Area G3 contained less than 0.300 ppb TCDD.

5.4 AREA H: MANHOLE NO. 2043

The low area containing manhole number 2043 located between South Redmond Road and the Missouri Pacific Railroad line just west of Rocky Branch was sampled using a modification of the fine grid procedure (see Figure 34). The 75-foot long grid contained six lines of sample aliquots collected every 15 feet for a total of 36 aliquots composited for one soil sample. The grid pattern was determined based on the contours of the land and was approved by the EPA RPM. Table 12 and Figure 34 present the analytical result showing less than 0.300 ppb dioxin.

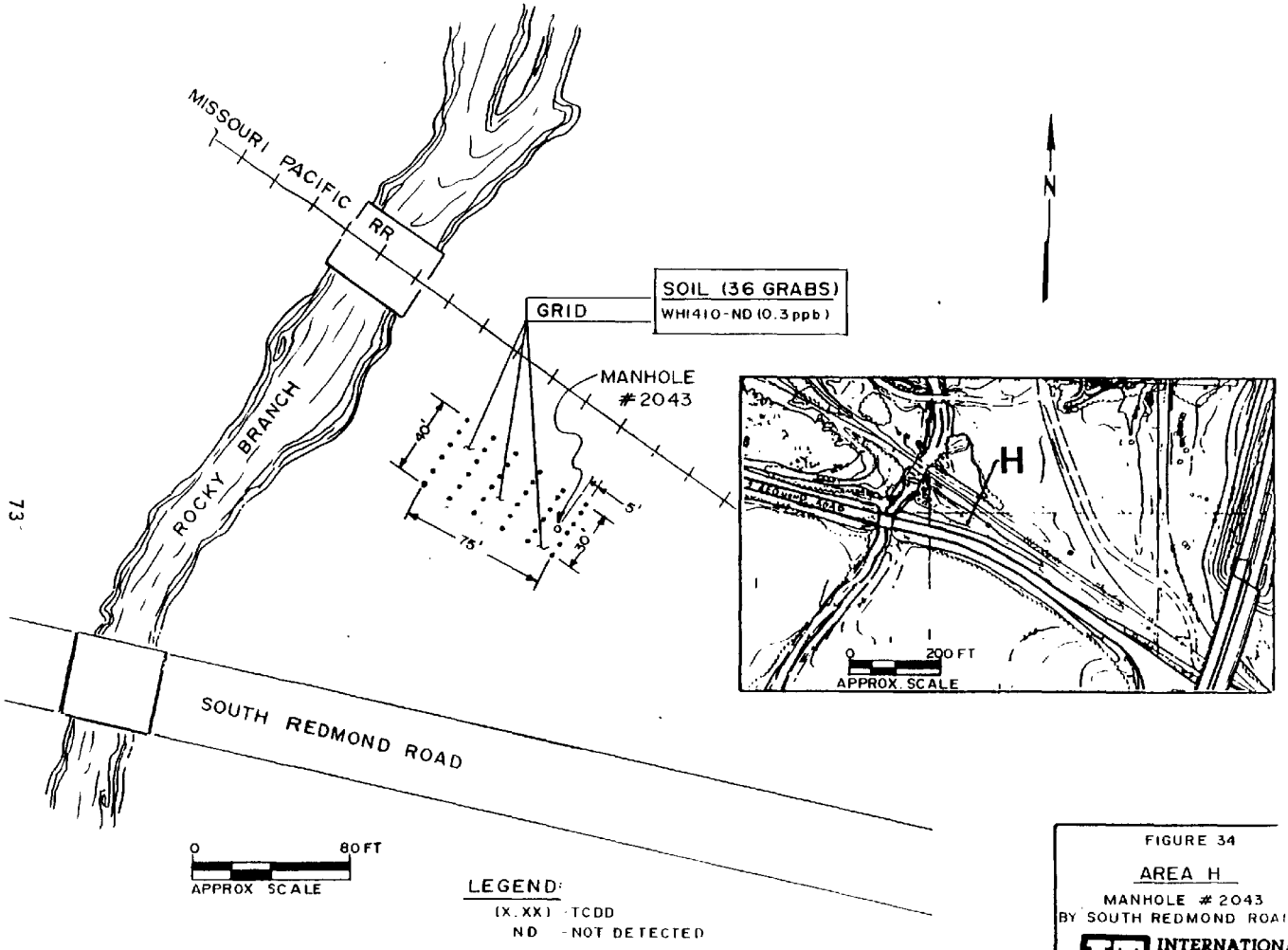


FIGURE 34

AREA H

MANHOLE # 2043
BY SOUTH REDMOND ROAD

INTERNATIONAL TECHNOLOGY CORPORATION

TABLE 12

AREA H: AREA AT MANHOLE NUMBER 2043
SUMMARY RESULT OF DIOXIN ANALYSIS OF SOIL SAMPLE

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH1410	Manhole Number 2043 near South Redmond Road	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable

5.5 AREA I: LAKE DUPREE

Soil sample aliquots were collected every 75 feet around the perimeter of the lake, two feet from the water's edge, for a total of 38 aliquots composited for analysis. For sediment sample collection, the lake was divided into four equal quadrants. One sediment composite sample containing six aliquots, was collected from each section. As required by the plan, only the top sediment was sampled; procedures used are described in Section 3.2.1. The aliquot locations were selected by the EPA RPM prior to sampling. See Table 13 and Figure 35 for sample locations and analytical results. All samples collected from Lake Dupree contained less than 0.300 ppb dioxin.

TABLE 13

AREA I: LAKE DUPREE
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL AND SEDIMENT SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH1452	Perimeter, Soil	0.300 U	N/A
WH2130	Quadrant #1, Sediment	0.300 U	N/A
WH2131	Quadrant #2, Sediment	0.300 U	N/A
WH2132	Quadrant #3, Sediment	0.300 U	N/A
WH2133	Quadrant #4, Sediment	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable

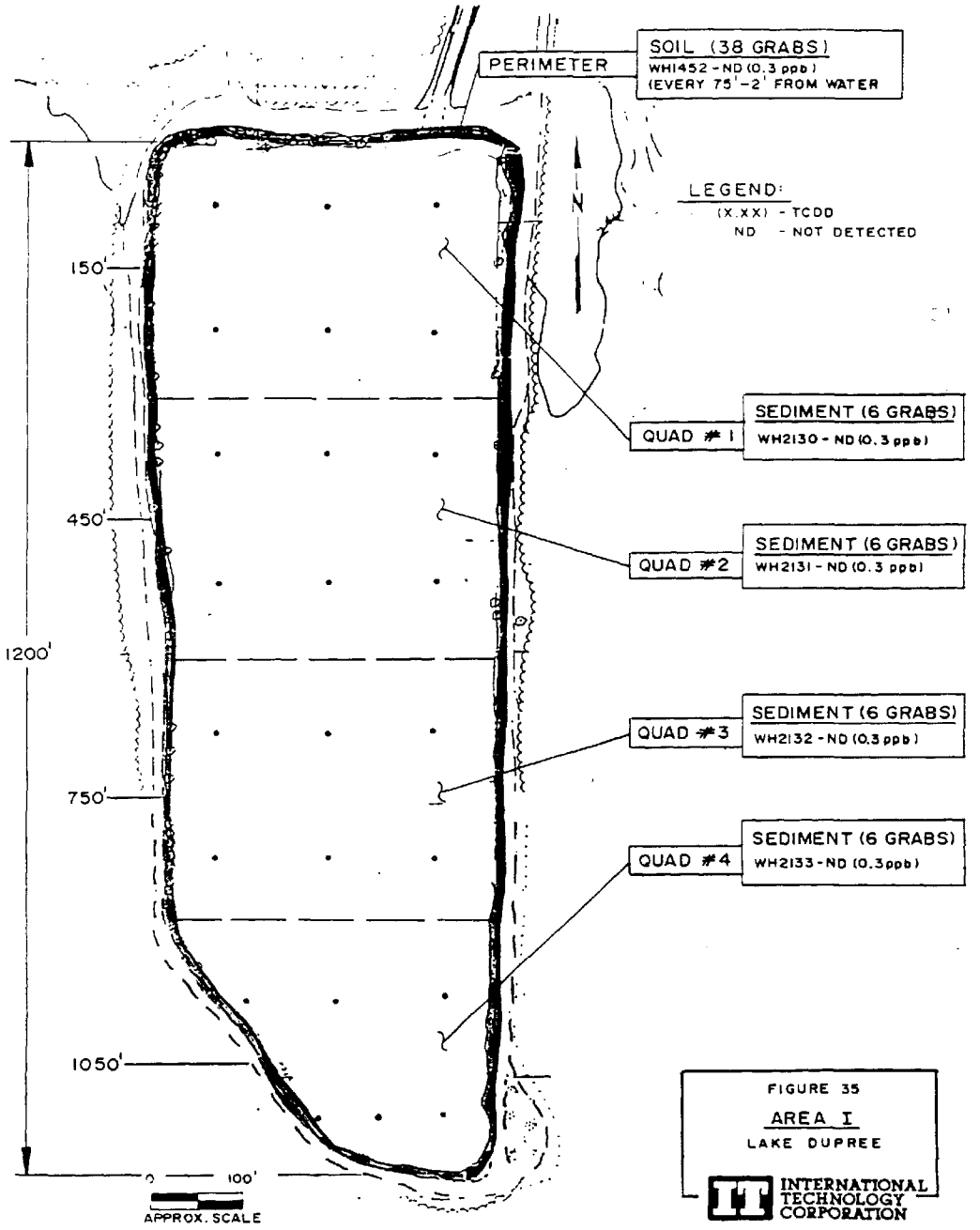


FIGURE 35

AREA I

LAKE DUPREE

INTERNATIONAL TECHNOLOGY CORPORATION

5.6 AREAS J, K, AND L: BAYOU METO BANKS

Only soil samples were collected along the banks of Bayou Meto. One 500-foot section was marked for composite samples on both the right and left banks (right and left determined facing upstream) at the locations marked J, K and L on the map in Figure 36. At K and L, the center of the bridges were considered the center of the 500-foot section. At Location J, a permanent marker fixed to a tree at the confluence of Bayou Meto and a tributary (see figure) was used as the center of the 500-foot section. Soil aliquots were collected every ten feet along the bank of each section for a total of 50 aliquots per composite sample. Aliquots were collected under the bridges at K and L and included in the composite. As a deviation from the plan, due to the contours of the banks, soil samples were collected at 6", 36", and 60" linear distance from the water's edge rather than 6", 12" and 36" elevation above the water level. This deviation was documented and approved by the EPA RPM in correspondence to Hercules Incorporated. As a permanent reference, the current water level was determined by measuring the distance from the railroad bridge at Location K down to the surface of the water. This measurement was documented in the field logbook.

The 6" composite samples were analyzed first; the composites for the 36" and 60" distances were archived. If the results for the 6-inch composite samples had been equal to or greater than 1 ppb TCDD, then the sample from the next distance would have been analyzed. However, in this case all the 6-inch composite samples contained less than 0.300 ppb TCDD; therefore, the other samples remained in archive (storage) status. On the left bank of Bayou Meto at Location J, the sampling team encountered obstacles from recent logging that severely hindered sampling at 36" and 60" from the water's edge. With the approval of the EPA RPM samples at these distances were not collected, and based on the results they were not needed. Table 14 and Figure 36 present the analytical results for this area.

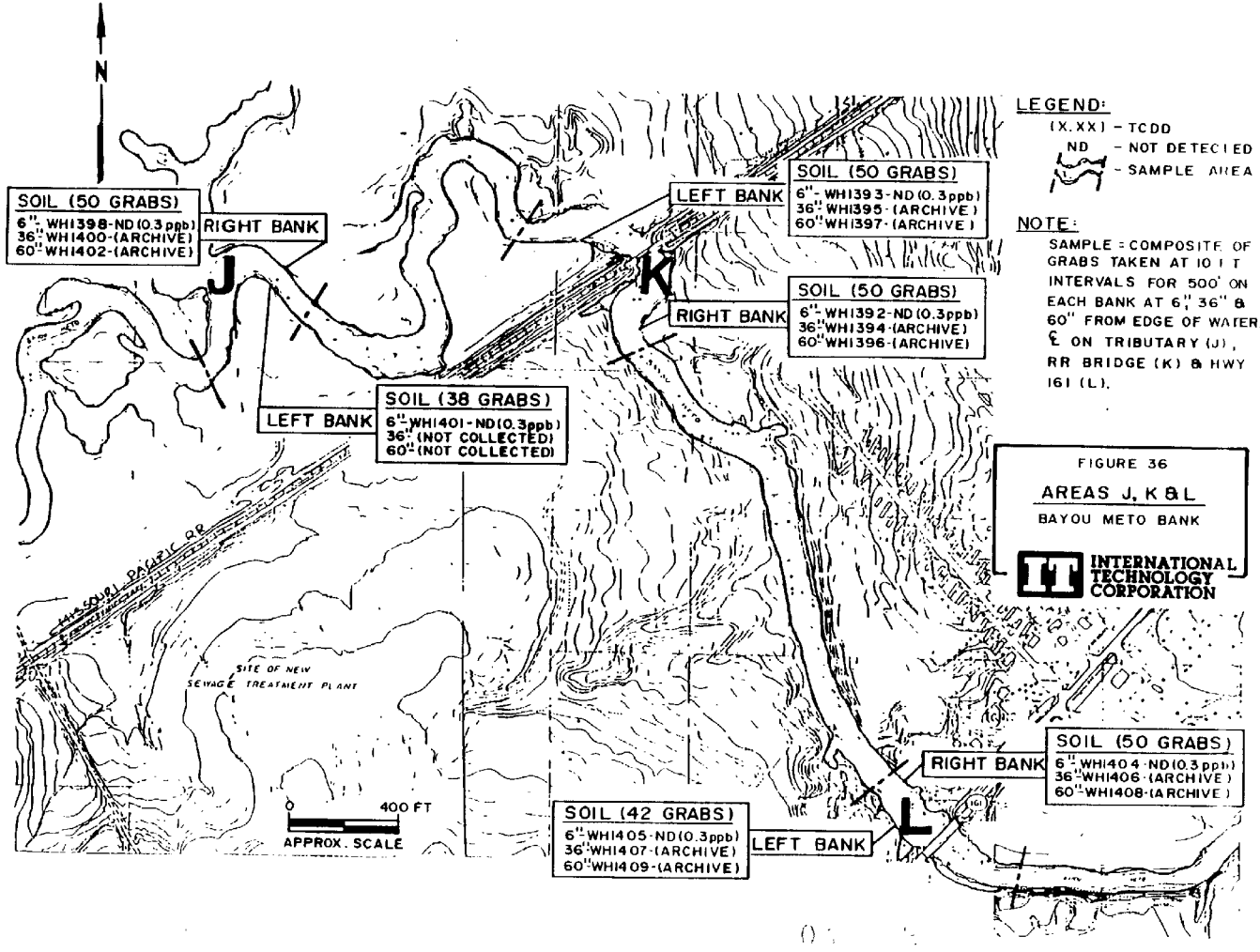

N
SOIL (50 GRABS)
6"- WHI398-ND (0.3 ppb)
36"- WHI400-(ARCHIVE)
60"- WHI402-(ARCHIVE)
RIGHT BANK
J
LEFT BANK
SOIL (38 GRABS)
6"- WHI401-ND (0.3ppb)
36"- (NOT COLLECTED)
60"- (NOT COLLECTED)
MISSOURI PACIFIC RR
SITE OF NEW SEWAGE TREATMENT PLANT
0 400 FT
APPROX. SCALE
SOIL (42 GRABS)
6"- WHI405-ND (0.3ppb)
36"- WHI407-(ARCHIVE)
60"- WHI409-(ARCHIVE)
LEFT BANK
L
RIGHT BANK
SOIL (50 GRABS)
6"- WHI404-ND (0.3 ppb)
36"- WHI406-(ARCHIVE)
60"- WHI408-(ARCHIVE)
K
RIGHT BANK
SOIL (50 GRABS)
6"- WHI392-ND (0.3ppb)
36"- WHI394-(ARCHIVE)
60"- WHI396-(ARCHIVE)
LEFT BANK
SOIL (50 GRABS)
6"- WHI393-ND (0.3ppb)
36"- WHI395-(ARCHIVE)
60"- WHI397-(ARCHIVE)
LEGEND:
(X.XX) - TCDD
ND - NOT DETECTED
- SAMPLE AREA
NOTE:
SAMPLE = COMPOSITE OF GRABS TAKEN AT 10 FT INTERVALS FOR 500' ON EACH BANK AT 6", 36" & 60" FROM EDGE OF WATER. ℄ ON TRIBUTARY (J), RR BRIDGE (K) & HWY 161 (L).
FIGURE 36
AREAS J, K & L
BAYOU METO BANK
IT INTERNATIONAL TECHNOLOGY CORPORATION

TABLE 14

AREAS J, K, and L: BANKS OF BAYOU METO
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
	AREA J		
WH1401	Left Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
WH1398	Right Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
	AREA K: BAYOU METO AT MPRR bridge		
WH1393	Left Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
WH1392	Right Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
	AREA L: BAYOU METO AT HIGHWAY 161 BRIDGE		
WH1405	Left Bank facing upstream, 6 inches from edge of water	0.300 U	N/A
WH1404	Right Bank facing upstream, 6 inches from edge of water	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable

5.7 AREAS M AND N: DRY CREEK BEDS

Based on conditions found at the location designated as "M" in the sampling plan, the actual sampling strategy deviated from that described in the plan. The deviations were documented and approved by the EPA RPM. The dry drainage ditch (or creek bed) at Area M was sampled using a linear grid strategy. One soil aliquot was collected every ten feet at the mid-point of the creek bed for a distance of 500 feet for one composite sample of 50 portions.

A second dry ditch that drained into Rocky Branch Creek just south of the location of the old STP pipeline (which was never located) was designated Area N. One composite soil sample was collected from this ditch. Aliquots were collected from the middle of the bottom of the ditch at 10-foot intervals starting from Rocky Branch Creek and extending approximately 250 feet for a total of 25 sample portions. Table 15 presents the analytical results. Figure 37 also shows the location of the two dry "creek beds" and the analytical results of the two composite samples collected. The soil samples from the two dry creek beds contained less than 1 ppb TCDD.

TABLE 15

AREAS M and N: DRY CREEK BEDS
SUMMARY OF RESULTS OF DIOXIN ANALYSES OF SOIL SAMPLES

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
	Area M:		
WH1411	Dry Creek Bed M (ORIG)	0.569	N/A
WH1412	Dry Creek Bed M (QDU of WH1411)	0.489	N/A
	Area N:		
WH1414	Dry Creek Bed N	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable

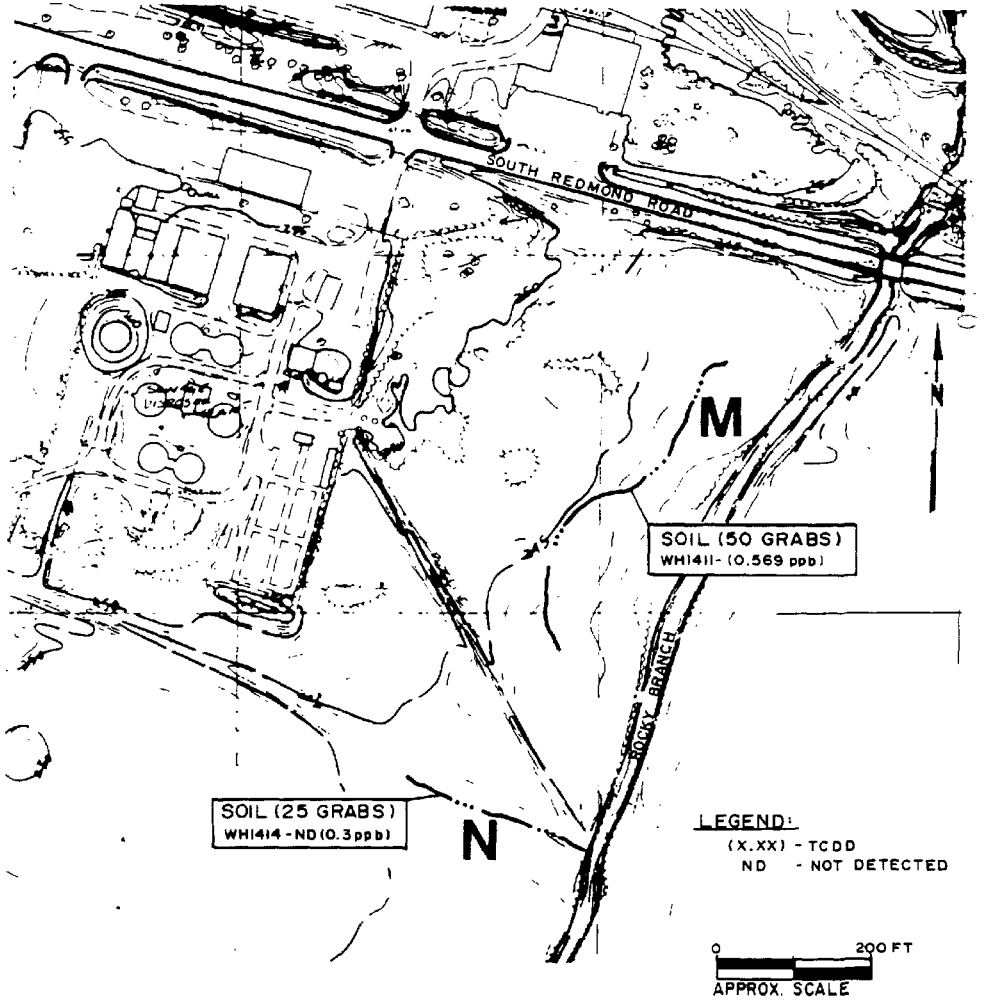


FIGURE 37

AREAS M & N

DRY CREEK BEDS

INTERNATIONAL TECHNOLOGY CORPORATION

5.8 AREA O: MOUND AT WEST MAIN STREET AND ROCKY BRANCH CREEK

At the request of the EPA RPM and approval of Hercules Incorporated, Area O was added to the sampling plan. The mound of soil located on the east bank of Rocky Branch just north of the West Main Street bridge was sampled using a modified fine grid strategy. One soil composite sample composed of 36 aliquots was collected for analysis. Table 16 presents the sample location description and analytical results. Figure 38 shows the grid pattern used (each point represents one aliquot collected) and the analytical results. The composite soil sample from this location contained less than 0.300 ppb TCDD.

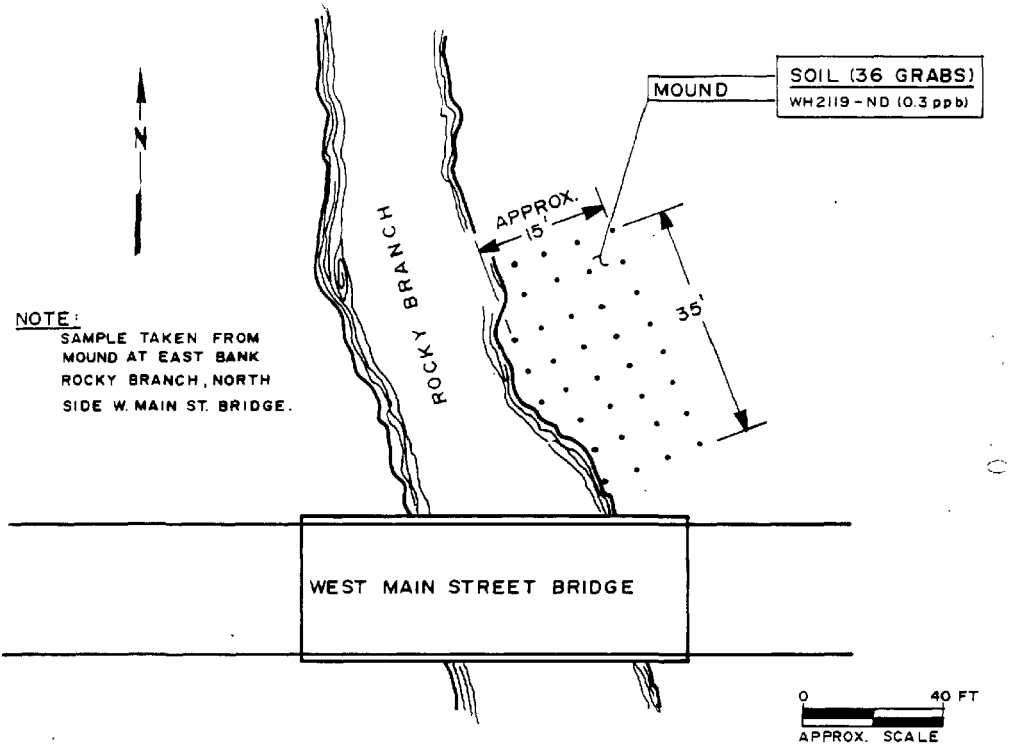
D105X J-5

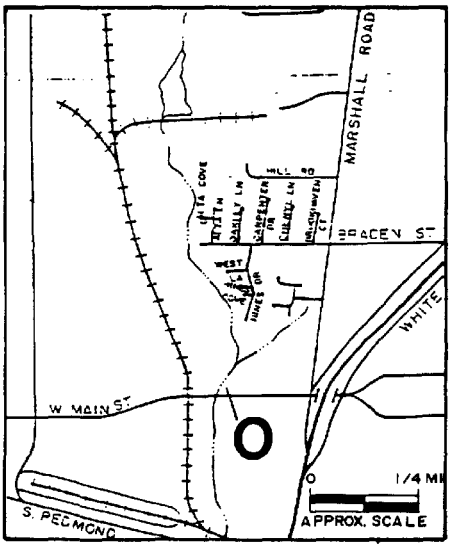
TABLE 16

AREA O: MOUND AT ROCKY BRANCH CREEK AND WEST MAIN STREET BRIDGE
SUMMARY RESULT OF DIOXIN ANALYSIS OF SOIL SAMPLE

Sample Number	Location	TCDD (ppb)	2,3,7,8-TCDD (ppb)
WH2119	East bank of Rocky Branch at West Main Street Bridge	0.300 U	N/A

U - Not detected at stated concentration
N/A - Not applicable





LEGEND:
(X.XX) - TCDD
ND - NOT DETECTED

FIGURE 38
AREA O
MOUND AT ROCKY BRANCH & W. MAIN STREET
INTERNATIONAL TECHNOLOGY CORPORATION

018834 001

6.0 FIELD DECONTAMINATION OF SAMPLING EQUIPMENT

All of the equipment used for sampling was decontaminated prior to initial use and between samples to prevent cross-contamination. The procedure involved rinsing gross soil or sediment from the sampling tool with tap water, then washing the tool with laboratory grade detergent ("Liquinox"), followed by rinses with fresh potable water, distilled water, acetone, hexane and a final distilled water rinse. Clean sampling tools were wrapped in aluminum foil during transport from one sample location to another.

D105X J-6

018835 001

7.0 SAMPLE HANDLING AND DOCUMENTATION

Collection of all field samples involved common sample documentation, handling and custody practices. These practices are necessary to ensure the integrity of the sample from collection to data reporting. The field sample custody procedures used for this program conform to the guidelines established in EPA's Test Methods for Evaluating Solid Wastes (SW-846).

7.1 FIELD DOCUMENTATION AND PHOTOGRAPHS

All pertinent field survey and sampling information was recorded in a logbook during each day of the field effort. The logbooks used were dedicated to this field effort. The Field Sampling Coordinator was responsible for ensuring that sufficient detail was recorded such that field activities could be reconstructed without relying on the memory of the field crew. An entry in a logbook included:

1) Date and time that work was begun.
2) Names of field task leader and team members.
3) Description of work area.
4) Location of work area, including map reference letter.
5) Details of work effort, including sampling procedures used, sample types, numbers, and locations for samples collected.
6) Field observations.
7) Equipment decontamination procedures.
8) Weather conditions.

Strict custody procedures were maintained with the field logbooks. While being used in the field, logbooks were kept with the field team at all times. After completion of the field effort the logbooks were submitted to the IT-FAS project files in Knoxville, Tennessee.

In addition, an individual field collection log form was completed as each sample was collected (see Attachment 5, Figure 1 for an example). This form contained, at a minimum, the following information:

1) Sample Number
2) Sample location description
3) Sample matrix type
4) Sample date and time
5) Depth sampled

6) Composite information
7) Pertinent observations/descriptions
8) Type of analysis requested and status (analyze/archive)
9) Initials of sampling personnel

Upon completion of the field effort the information on the individual field collection logs was entered into a computer database for data management and reporting. The original collection sheets have been placed in individual protective covers and are maintained in the IT-FAS project files.

For each sample collected one or more photographs was taken with a 35mm databack camera. The photographs showed the sample location including the best available reference points.

7.2 SAMPLE PACKAGING AND LABELING

Upon collection all samples were transferred into glass sample jars or bottles and capped with teflon-lined lids. With EPA approval, I-Chem Series 200 (or better) sample containers were used. Each sample container was labeled with a unique sample number (using serialized number tape on the lid and handwritten on the I-Chem label in indelible ink), the date collected, the analysis requested, the analytical method to be used, the preservative (if any) and the site location. An exception to this practice was taken for samples requiring multiple analyses (i.e., priority pollutant compounds); the same number was placed, using an indelible ink marker, on the separate containers for each of these samples. To prevent tampering with the sealed and labeled samples, custody tape was placed over the bottle cap, covering the sample number on the lid and the label on the bottle. For shipment to the laboratory, each sample container was placed in a heavy duty zip-lock bag, then into a sample can surrounded by an absorbent material. Each sample can was closed and a custody tape seal attached across the top. The sample cans were placed in coolers for overnight delivery to the designated laboratory. Additional absorbent or packing material was used to fill the voids in the cooler.

7.3 CHAIN-OF-CUSTODY

A required part of any sampling and analytical program is to protect the integrity of, and keep track of, samples from collection to data reporting. This includes the ability to trace the possession and handling of samples from the

time of collection, through analysis and final disposition. This documentation is referred to as "chain-of-custody".

Numerous sample identification documents were used to maintain identification and chain-of-custody of all samples collected and to control sample disposition. These include: sample number tape, sample labels, custody seals, chain-of-custody records, request for analysis forms and other laboratory specific forms. All labels were filled out with waterproof ink.

ITAS supplied the pre-numbered (in duplicate) tape used for sample identification, (with EPA approval). One label tape number was attached to each sample collected, and the second copy of the same number was affixed to the individual collection log sheet. Unused label numbers were returned to the Field Sampling Coordinator. For a sample requiring multiple analyses, the label tape number was attached to the sample container collected for TCDD analysis and the same sample number was handwritten in indelible ink on the sample labels of all other containers for that sample.

Sample cans containing samples for shipment to TMS Analytical Services, Inc. were placed in coolers sealed with custody seals. Two seals were placed on each cooler, one at the front and one at the back. Clear tape was placed over the seals to ensure that they were not accidentally broken during shipment. All samples were shipped under requirements listed in 49 CFR 172.101. Any additional requirements (i.e., labels) by the delivery service were determined prior to the commencement of sampling.

Those samples designated for archive status were maintained on-site throughout the duration of the field effort. Custody tape was placed over the sample container as described above and the container placed in a ziplock bag and kept with other archived samples in a locked trunk. The trunk was stored in a secured private warehouse. The keys to the trunk were in the custody of the IT-FAS Project Manager and the Field Sampling Coordinator only. Upon completion of the field effort all archived samples, under the custody of the IT-FAS Project Manager and Field Sampling Coordinator, were transferred to secured storage in Knoxville, Tennessee.

All samples being shipped to the laboratory for analysis were accompanied by a Chain-of-Custody Record (see Attachment 5, Figure 2). When transferring

samples, the individuals relinquishing and receiving would sign, date, and note the time on the record. This record was used to document sample custody transfer from the sampler to another field team member, to the shipper, then to the designated laboratory.

The samples were also accompanied by a Request-for-Analysis Record (see Attachment 5, Figure 3). This record listed the required analytical test(s) to be performed on each sample, as well as other sample information pertinent to analysis (such as sample volume, type, preservative used, possible hazards, turn around time requested, and disposal instructions).

The originals of the Chain-of-Custody and Request-for-Analysis records identifying the contents of the sample shipment were sealed in a zip-lock bag and placed in the lid of the corresponding sample cooler for delivery to the designated laboratory. The yellow copy of each record was maintained by the Field Sampling Coordinator on site until the end of the field effort, at which time these copies were transferred to the IT-FAS project files.

For those samples requiring multiple analyses, two Chain-of-Custody and Request for Analysis records were initiated. The originals were shipped in separate shipments along with the corresponding sample containers to the appropriate laboratory for analysis.

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018839 001

8.0 ANALYTICAL PROGRAM*

After proper documentation and packaging procedures were completed, samples for dioxin analysis were shipped via an overnight carrier (e.g., Federal Express) to TMS Analytical Services, Inc., Indianapolis, Indiana. The following day, the on-site IT-FAS Project Manager verified by telephone that the samples had been received in good condition.

All the samples submitted were analyzed for TCDD on a 48-hour turnaround basis. Analysis for TCDD was performed using semi-isomer specific high resolution gas chromatography/tandem mass spectrometry (GC/MS/MS) as described in "Rapid Determination of TCDD in Soil and Sediment Using Gas Chromatography and Tandem Mass Spectrometry", USEPA, Region VII, March 1986 (Attachment 2). The detection limit for TCDD was less than 0.300 ppb. Results of 0.300 ppb or less are reported with the qualifier "U" (i.e., not detected).

For any sample with results for TCDD of 1 ppb or greater, confirmation analysis for 2,3,7,8-TCDD was performed using high resolution gas chromatography/low resolution mass spectrometry. If the extract prepared for the initial analysis for TCDD was used for the isomer-specific analysis, the procedures described in USEPA Contract Laboratory Program Statement of Work (SOW) for Rapid Turnaround Dioxin Analysis Multi-Media, November 1986, page III-67 (Attachment 3) were used. If it was necessary to prepare a new extract for the isomer-specific analysis, procedures for sample preparation as described in Attachment 3, page III-32 and analysis by high resolution gas chromatography/low resolution mass spectrometry as described in Attachment 3, page III-54 were used. The quality control/quality assurance procedures followed for the analytical program were according to Attachment 3, page III-61, option 4d and "Regional Technical Assistance for Preparing Quality Assurance Project and Laboratory Plans", ROQA-005/85, revised January, 1986, by Steven R. Lemons, Office of Quality Assurance, Environmental Services Division, USEPA, Region VI (Attachment 4).

Analytical results were communicated by Hercules Incorporated to the EPA RPM and the IT-FAS Project Manager as they became available so that decisions about further sampling could be made. Copies of the summary data report forms, TCDD Final Data Report Form and the GC/MS/MS Worksheet Report Form, for TCDD by semi-

isomer specific procedures and Form B-1S, TCDD Soil Data Report Form for 2,3,7,8-TCDD are included in this report as Appendix B (TCDD) and Appendix C (2,3,7,8-TCDD). Identification of samples corresponding to the sample numbers listed in these data report forms can be found in Tables A-1 and A-2, Appendix A. Copies of the full reports for each sample analyzed are found in Volumes III and IV of this report.

*This section written by Hercules Incorporated and edited by TMS Analytical Services, Inc.

D105X J-8

018841 001

9.0 PROJECT DATABASE MANAGEMENT SYSTEM

A Relational Database Management System (RDMS) was used as a sophisticated means of organizing, storing, maintaining, combining, and retrieving sample information. Sample information and analytical data were entered into the system as soon as they were received and routinely screened for accuracy and status changes.

The basic field information was initially recorded on a sample or specimen collection log (see Attachment 5, Figure 1 for an example). This field log was then used to enter the sample data into the computer so that the field information could be linked to the analytical results as soon as they were available. The sample or specimen collection log is considered generic and may contain slots that do not apply to every project; therefore, the collection log headings that are applicable to the fine grid sampling project and which are entered into the database are defined in Table 17. Definitions strictly applicable to analytical data are presented in Table 18.

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TABLE 17

APPLICABLE COLLECTION LOG AND DATABASE HEADINGS AND DEFINITIONS

SAMPLE COLLECTION LOG

Sample Number

A unique alphanumeric identification assigned to each sample at the time of collection.

Date

The date the sample was collected.

Sample Location/Description

Brief comment to describe the location of sample collection including a reference to a pertinent structure or position.

Sample Type

CO

Core; samples are collected as a cross section and examined at intervals, other than soil or sediment.

LI

Liquid; any liquid sample that is not water or oil.

SE

Sediment; sample from area of material deposited by water.

SO

Soil; sample of soil.

Composite Description (or Units in Composite)

Number indicates number of grabs (aliquots) composited.

NA indicates that sample is composed of materials collected from only one sample point.

Elevation

For sediment samples, elevation was used as the depth of water below which the sample was taken (negative numbers). For soil samples, elevation was used for the height above water level.

TABLE 17

APPLICABLE COLLECTION LOG AND DATABASE HEADINGS AND DEFINITIONS

(CONTINUED)

Depth of Take

Applicable to samples that are to be taken at specific depth below the surface in cores and water.

QA/QC Code

QBL

Blank; a sample of material and container that have followed the same path unopened or altered to show that there was no extraneous contamination.

QDU

Duplicate; two separate samples for the purpose of determining degrees of variation of the sample area (i.e., the wipe sampling of two adjacent areas, two adjacent soil samples) in as nearly identical conditions possible.

ORIG

Original sample of a QA/QC sample which requires comparison; reference ORIG and QDU samples.

QDM

Composite mixture check sample.

Lab (abbreviated LB in Sample Table A-1)

TM

TMS Analytical Services, Indianapolis, Indiana.

MK

IT Analytical Services, Middlebrook Pike, Knoxville, Tennessee.

Analysis Request

03

TCDD, if ≥1 ppb then 2,3,7,8-TCDD.

04

Other analytical parameters (i.e., priority pollutant compounds or waste characterization).

TABLE 17

APPLICABLE COLLECTION LOG AND DATABASE HEADINGS AND DEFINITIONS

(CONTINUED)

Analysis Status (called Sample Status in Tables A-1 and A-2)
01
Priority - analyze immediately
02
Analyze - not a rush sample
03
Hold - archive status
04
EPA Split Sample

NOTE: Headings not defined are considered self-explanatory.

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TABLE 18

ANALYTICAL REPORT ABBREVIATIONS, CODES AND DEFINITIONS

Result Sample No.

A unique alphanumeric identification assigned to each sample at the time of collection.

Dioxin Units

Concentration units for dioxins such as ng/sample for liquid trip and equipment rinsate QC blanks and parts per billion (ppb; ng/gm; µg/kg) for soils and sediment.

Q

Qualifiers.

U

Compound analyzed for but not detected, value given is the detection limit.

2,3,7,8-TCDD

Concentration of the 2,3,7,8 isomer of tetrachlorodibenzo-p-dioxin.

TCDD

Concentration of some of the tetrachlorodibenzo-p-dioxin isomers present, including 2,3,7,8-TCDD.

D105X J-9-T2(CP)

018846 001

APPENDIX
A

APPENDIX A

SAMPLE TABLES

TABLE A-1

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH1352	29-JUN-88	SE	SEDIMENT, CONFLUENCE OF EAST AND WEST LEGS OF ROCKY BRANCH CREEK	grab	3			TM A	NA	01	03
WH1353	29-JUN-88	LI	LIQUID, HEXANE EQUIPMENT RINSE		0	QRI		TM A	2 RINSES	01	03
WH1354	29-JUN-88	SO	SOIL, 0-500 FT 6 IN ABOVE WATER, ROCKY BRANCH WEST LEG, LEFT BANK	0-3 in	5			TM A	50 GRABS	01	03
WH1355	29-JUN-88	SO	SOIL 0-500 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	5			TM A	50 GRABS	01	03
WH1356	29-JUN-88	SO	SOIL, 0-500 FT 12 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	1			TM A	50 GRABS	03	03
WH1357	29-JUN-88	SO	SOIL 0-500 FT 12 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	1			TM A	50 GRABS	03	03
WH1358	29-JUN-88	LI	LIQUID HEXANE, TRIP BLANK		0	QBL		TM A	NA	01	03
WH1359	29-JUN-88	SO	SOIL, 0-500 FT 36 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	3			TM A	50 GRABS	03	03
WH1360	29-JUN-88	SO	SOIL, 0-500 FT 36 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	3			TM A	50 GRABS	03	03
WH1361	30-JUN-88	SO	SOIL, 510-1000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	5			TM A	50 GRABS	01	03
WH1362	30-JUN-88	SO	SOIL, 510-1000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	5			TM A	50 GRABS	01	03
WH1363	30-JUN-88	SO	SOIL, 510-1000 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	1			TM A	50 GRABS	03	03
WH1364	30-JUN-88	SO	SOIL, 510-1000 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	1			TM A	50 GRABS	03	03
WH1365	30-JUN-88	SO	SOIL, 510-1000 FT 36 IN ABOVE WATER ROCKY BRANCH WEST LEG, LEFT BANK	0-3 in	3			TM A	50 GRABS	03	03
WH1366	30-JUN-88	SO	SOIL, 510-1000 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	3			TM A	50 GRABS	03	03
WH1367	30-JUN-88	SO	SOIL,1010-1500 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in.	5			TM A	50 GRABS	01	03
WH1368	30-JUN-88	SO	SOIL,1010-1500 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	5			TM A	50 GRABS	01	03
WH1369	30-JUN-88	SO	SOIL,1010-1500 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	1			TM A	50 GRABS	03	03
WH1370	30-JUN-88	SO	SOIL,1010-1500 FT 12 IN ABOVE WATER ROCKY BRANCH WEST LEG RIGHT BANK	0-3 in	1			TM A	50 GRABS	03	03
WH1371	30-JUN-88	LI	LIQUID HEXANE EQUIPMENT RINSE		0	QRI		TM	NA	03	03
WH1372	30-JUN-88	SO	SOIL 1010-1500 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG RIGHT BANK	0-3 in	3			TM A	50 GRABS	03	03
WH1373	30-JUN-88	SO	SOIL,1010-1500 FT 36 IN ABOVE WATER ROCKY BRANCH WEST LEG, LEFT BANK	0-3 in	3			TM A	50 GRABS	03	03
WH1374	30-JUN-88	SO	SOIL,1510-2000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	5			TM A	50 GRABS	01	03
WH1375	30-JUN-88	SO	SOIL,1510-2000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG LEFT BANK	0-3 in	5	ORIG	WH1377	TM A	50 GRABS	01	03
WH1376	03-JUL-88	LI	LIQUID, HEXANE, TRIP BLANK		0	QBL		TM A	NA	01	03

TABLE KEY

QC - Quality Control

QRI - Rinse
QBL - Blank
ORIG - Original
QDU - Duplicate
SPLT - Split
QDM - Mix Check

LB - Lab

TM - TMS Analytical Services
Indianapolis, IN

MK - IT Analytical Services
Middlebrook Pike
Knoxville, TN

Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH1377	30-JUN-88	SO	SOIL,1510-2000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG LEFT BANK	0-3 in	5	QDU	WH1375	TM	A	50 GRABS	01	03
WH1378	01-JUL-88	SE	SEDIMENT ROCKY BRANCH, WEST LEG AT VERTAC FENCE	grab	- 4	ORIG	WH1391	TM	A	NA	01	03
WH1379	30-JUN-88	SO	SOIL,1510-2000 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, LEFT BANK,	0-3 in	5	SPLT	WH1375	TM	A	50 GRABS	04	03
WH1380	01-JUL-88	SO	SOIL 1510-2000 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	1			TM	A	50 GRABS	03	03
WH1381	01-JUL 88	SO	SOIL,1510-2000 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	1			TM	A	50 GRABS	03	03
WH1382	10-JUL-88	SO	SOIL,1510-2000 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG RIGHT BANK	0-3 in	3			TM	A	50 GRABS	03	03
WH1383	10-JUL-88	SO	SOIL,1510-2000 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	3			TM	A	50 GRABS	03	03
WH1384	01-JUL-88	SO	SOIL,2010-2230 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	5			TM	A	50 GRABS	01	03
WH1385	01-JUL-88	SO	SOIL,2010-2230 FT 6 IN ABOVE WATER, ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	.5			TM	A	50 GRABS	01	03
WH1386	01-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE		0	QR1		TM	A	2 RINSES	03	03
WH1387	01-JUL-88	SO	SOIL,2010-2230 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	1			TM	A	50 GRABS	03	03
WH1388	01-JUL-88	SO	SOIL,2010-2230 FT 12 IN ABOVE WATER ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	1			TM	A	50 GRABS	03	03
WH1389	01-JUL-88	SO	SOIL,2010-2230 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG, LEFT BANK	0-3 in	3			TM	A	50 GRABS	03	03
WH1390	01-JUL 88	SO	SOIL,2010-2230 FT 36 IN ABOVE WATER ROCKY BRANCH, WEST LEG, RIGHT BANK	0-3 in	3			TM	A	50 GRABS	03	03
WH1391	01-JUL-88	SE	SEDIMENT, ROCKY BRANCH, WEST LEG AT VERTAC FENCE	grab	- 4	SPLT	WH1378	TM	A	NA	04	03
WH1392	02-JUL-88	SO	SOIL, BAYOU METO, MPBR, 6 IN FROM WATER, RIGHT BANK	0-3 in	5			TM	K	50 GRABS	01	03
WH1393	02-JUL-88	SO	SOIL, BAYOU METO, MPBR, 6 IN FROM WATER, LEFT BANK	0-3 in	5			TM	K	50 GRABS	01	03
WH1394	03-JUL-88	SO	SOIL, BAYOU METO, MPBR, 36 IN FROM WATER, RIGHT BANK	0-3 in	3			TM	K	50 GRABS	03	03
WH1395	03-JUL-88	SO	SOIL, BAYOU METO, MPBR, 36 IN FROM WATER, LEFT BANK	0-3 in	3			TM	K	50 GRABS	03	03
WH1396	03 JUL 88	SO	SOIL, BAYOU METO, MPBR, 60 IN FROM WATER, RIGHT BANK	0-3 in	5			TM	K	50 GRABS	03	03
WH1397	03-JUL-88	SO	SOIL, BAYOU METO, MPBR, 60 IN FROM WATER, LEFT BANK	0-3 in	5			TM	K	50 GRABS	03	03
WH1398	03-JUL-88	SO	SOIL, BAYOU METO, 6 IN FROM WATER, RIGHT BANK	0 3 in	5	ORIG	WH1399	TM	J	50 GRABS	01	03
WH1399	03-JUL-88	SO	SOIL, BAYOU METO 6 IN FROM WATER, RIGHT BANK	0-3 in	5	SPLT	WH1398	TM	J	50 GRABS	04	03
WH1400	03-JUL 88	SO	SOIL, BAYOU METO, 36 IN FROM WATER, RIGHT BANK	0-3 in	1			TM	J	50 GRABS	01	03
WH1401	03-JUL-88	SO	SOIL, BAYOU METO, 6 IN FROM WATER, RIGHT BANK	0-3 in	5			TM	J	38 GRABS	01	03

TABLE KEY

QC - Quality Control

QR1 - Rinse
QBL - Blank
ORIG - Original
QDU - Duplicate
SPLT - Split
QDM - Mix Check

LB - Lab

TM - TMS Analytical Services
Indianapolis, IN

MK - IT Analytical Services
Middlebrook Pike
Knoxville, TN

Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH1402	03-JUL-88	SO	SOIL, BAYOU METO, 60 IN. FROM WATER, RIGHT BANK	0-3 in	5			TM	J	50 GRABS	01	03
WH1403	03-JUL-88	LI	HEXANE EQUIPMENT RINSE		0	QRI		TM	J	NA	03	03
WH1404	04-JUL-88	SO	SOIL, BAYOU METO AT HWY 161 BRIDGE AT 6 IN FROM WATER, RIGHT BANK	0-3 in	5			TM	L	50 GRABS	01	03
WH1405	04 JUL-88	SO	SOIL, BAYOU METO AT HWY 161 BRIDGE AT 6 IN. FROM WATER LEFT BANK	0-3 in	.5			TM	L	42 GRABS	01	03
WH1406	04-JUL-88	SO	SOIL, BAYOU METO AT HWY 161 BRIDGE AT 36 IN FROM WATER, RIGHT BANK	0-3 in	3			TM	L	50 GRABS	03	03
WH1407	04-JUL-88	SO	SOIL, BAYOU METO HWY 161 BRIDGE, 36 IN FROM WATER, LEFT BANK	0-3 in	3			TM	L	50 GRABS	03	03
WH1408	04 JUL-88	SO	SOIL, BAYOU METO HWY 161 BRIDGE, 60 IN FROM WATER, RIGHT BANK	0-3 in	5			TM	L	50 GRABS	03	03
WH1409	04-JUL-88	SO	SOIL, BAYOU METO HWY 161 BRIDGE, 60 IN FROM WATER, LEFT BANK	0-3 in	5			TM	L	50 GRABS	03	03
WH1410	04-JUL-88	SO	SOIL, MANHOLE #2043, SOUTH REDMOND ROAD	0-3 in	0			TM	M	36 GRABS	01	03
WH1411	04-JUL-88	SO	SOIL, DRY CREEK BED, NEXT TO ROCKY BRANCH, SOUTH OF REDMOND ROAD	0-3 in	0	ORIG	WH1412	TM	M	50 GRABS	01	03
WH1412	04-JUL-88	SO	SOIL, DRY CREEK BED NEXT TO ROCKY BRANCH, SOUTH OF REDMOND ROAD	0-3 in	0	QDU	WH1411	TM	M	50 GRABS	01	03
WH1413	04-JUL-88	SO	SOIL, DRY CREEK BED, NEXT TO ROCKY BRANCH,S OF REDMOND ROAD,EPA SPLIT	0-3 in	0	SPLT	WH1411	TM	M	50 GRABS	04	03
WH1414	04-JUL-88	SO	SOIL, DRY CREEK BED, 1/4 MILE SOUTH OF REDMOND RD.NEXT TO ROCKY BRANCH.	0-3 in.	0			TM	N	25 GRABS	01	03
WH1415	04-JUL-88	SO	SOIL, 10-500 FT, 6 IN ABOVE WATER, ROCKY BRANCH, EAST LEG LEFT BANK	0-3 in.	5			TM	B	50 GRABS	01	03
WH1416	04 JUL 88	SO	SOIL, BLANK			QBL		TM	B	NA	01	03
WH1417	04-JUL-88	SO	SOIL,10-500 FT, 12 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 in.	1			TM	B	50 GRABS	03	03
WH1418	04-JUL-88	SO	SOIL, 10-500 FT, 6 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, RIGHT BANK	0-3 in.	.5			TM	B	50 GRABS	01	03
WH1419	04-JUL 88	SO	SOIL,10-500 FT 36 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 in	3			TM	B	50 GRABS	03	03
WH1420	04-JUL-88	SO	SOIL,10-500 FT, 12 IN. ABOVE WATER, ROCKY BRANCH, EAST LEG, RIGHT BANK.	0-3 in	1			TM	B	50 GRABS	03	03
WH1421	04-JUL-88	SO	SOIL, BLANK			QBL		TM	B	NA	01	03
WH1422	04-JUL-88	SO	SOIL,10-500 FT, 36 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, RIGHT BANK.	0-3 in.	3			TM	B	50 GRABS	03	03
WH1423	04-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE			QRI		TM	B	NA	01	03
WH1424	05-JUL-88	SO	SOIL, 510-1000 FT 6 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, RIGHT BANK	0-3 in.	5			TM	B	50 GRABS	01	03
WH1425	05-JUL-88	SO	SOIL, 510-1000 FT 6 IN ABOVE WATER ROCKY BRANCH, EAST LEG, LEFT BANK	0-3 in.	5			TM	B	50 GRABS	01	03
WH1426	05 JUL-88	SO	SOIL,510-1000 FT 12 IN ABOVE WATER, ROCKY BRANCH, EAST LEG, RIGHT BANK	0-3 in	1			TM	B	50 GRABS	03	03

TABLE KEY

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QRI - Rinse
QBL - Blank
ORIG - Original
QDU - Duplicate
SPLT - Split
QDM - Mix Check

LB - Lab

TM - TMS Analytical Services
Indianapolis, IN

HK - IT Analytical Services
Middlebrook Pike
Knoxville, TN

Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH1427	05-JUL-88	SO	SOIL.510-1000 FT 12 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	1			TM	B	50 GRABS	03	03
WH1428	05-JUL-88	SO	SOIL.510-1000 FT 36 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 in	3			TM	B	50 GRABS	03	03
WH1429	05-JUL-88	SO	SOIL.510-1000 FT 36 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	3			TM	B	50 GRABS	03	03
WH1430	05-JUL-88	SO	SOIL.1010-1500 FT 6 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 in	5			TM	B	46 GRABS	01	03
WH1431	05-JUL-88	SO	SOIL.1010-1500 FT 6 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	5			TM	B	46 GRABS	01	03
WH1432	05 JUL-88	SO	SOIL.1010-1500 FT 12 IN ABOVE WATER ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 in	1			TM	B	46 GRABS	03	03
WH1433	05-JUL-88	SO	SOIL.1010-1500 FT 12 IN ABOVE WATER ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	1			TM	B	46 GRABS	03	03
WH1434	05 JUL-88	SO	SOIL.1010-1500 FT 36 IN ABOVE WATER ROCKY BRANCH EAST LEG. RIGHT BANK.	0-3 in	3			TM	B	46 GRABS	03	03
WH1435	05-JUL-88	SO	SOIL.1010-1500 FT 36 IN ABOVE WATER ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in.	3			TM	B	46 GRABS	03	03
WH1436	05-JUL-88	SO	SOIL.1510-2000 FT 6 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 in.	.5			TM	B	44 GRABS	01	03
WH1437	05 JUL-88	SO	SOIL.1510-2000 FT 6 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in.	5			TM	B	44 GRABS	01	03
WH1438	05-JUL-88	SO	SOIL.1510-2000 FT 12 IN ABOVE WATER ROCKY BRANCH. EAST LEG. RIGHT BANK.	0-3 in.	1			TM	B	44 GRABS	03	03
WH1439	05 JUL 88	SO	SOIL.1510-2000 FT 12 IN ABOVE WATER ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	1			TM	B	44 GRABS	03	03
WH1440	05-JUL-88	SO	SOIL.1510-2000 FT 36 IN ABOVE WATER ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 in	3			TM	B	44 GRABS	03	03
WH1441	05 JUL-88	SO	SOIL.1510-2000 FT 36 IN ABOVE WATER ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	3			TM	B	44 GRABS	03	03
WH1442	05-JUL-88	LI	LIQUID. HEXANE. EQUIPMENT RINSE.			QRI		TM	B	NA	01	03
WH1443	05-JUL-88	SO	SOIL.2010-2500 FT 6 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in.	5			TM	B	50 GRABS	01	03
WH1444	05-JUL-88	SO	SOIL.2010-2500 FT 6 IN ABOVE WATER. ROCKY BRANCH. EAST LEG. RIGHT BANK	0-3 in.	5			TM	B	50 GRABS	01	03
WH1445	05-JUL-88	SO	SOIL.2010-2500 FT 12 IN ABOVE WATER ROCKY BRANCH. EAST LEG. LEFT BANK	0-3 in	1			TM	B	50 GRABS	03	03
WH1446	07-JUL-88	SO	SOIL, BLANK		0	QBL		TM	C	NA	01	03
WH1447	07-JUL-88	SO	SOIL.2010-2500 FT 36 IN ABOVE WATER ROCKY BRANCH. EAST LEG. LEFT BANK.	0-3 in	3			TM	B	50 GRABS	03	03
WH1448	07-JUL-88	LI	LIQUID HEXANE. EQUIPMENT RINSE			QRI		TM	C	NA	01	03
WH1449	10-JUL-88	SO	SOIL.2510-2940 FT 6 IN ABOVE WATER. EAST ROCKY BRANCH. LEFT BANK	0-3 in	5	ORIG	WH1450	TM	A	37 GRABS	01	03
WH1450	10-JUL-88	SO	SOIL.2510-2940 FT 6 IN ABOVE WATER. EAST ROCKY BRANCH. LEFT BANK	0-3 in	5	QDU	WH1449	TM	A	37 GRABS	01	03
WH1451	10-JUL-88	SO	SOIL.2510-2940 FT 6 IN ABOVE WATER. E ROCKY BRANCH LEFT BANK EPA SPLIT	0-3 in	5	SPLT	WH1449	TM	A	37 GRABS	04	03

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WH1452	06 JUL 88	SO	SOIL. 2 FT FROM WATERS EDGE AROUND THE PERIMETER OF LAKE DUPREE	0-3 in	0		TM I	30 GRABS	01	03
WH1453	07-JUL-88	SO	SOIL. ROW 1, SOUTH 0-250 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	55 GRABS	01	03
WH1454	07-JUL-88	SO	SOIL. ROW 1, NORTH.0-250 FEET. EAST ROCKY BRANCH	0-3 in.	0		TM C	55 GRABS	01	03
WH1455	07 JUL-88	SO	SOIL. ROW 1. EAST 0-250 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	55 GRABS	01	03
WH1456	07-JUL-88	SO	SOIL. ROW 2, SOUTH. 0-250 FEET.EAST ROCKY BRANCH	0-3 in	0		TM C	53 GRABS	03	03
WH1457	07-JUL-88	SO	SOIL. ROW 2, NORTH. 0-250 FEET.EAST ROCKY BRANCH	0-3 in	0		TM C	53 GRABS	03	03
WH1458	07-JUL-88	SO	SOIL. ROW 2, EAST, 0-250 FEET. EAST ROCKY BRANCH	0 3 in.	0		TM C	53 GRABS	03	03
WH1459	07-JUL-88	SO	SOIL. ROW 1, NORTH, 500-750 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	50 GRABS	01	03
WH1460	07-JUL 88	SO	SOIL, ROW 1, SOUTH, 500-750 FEET, EAST ROCKY BRANCH	0-3 in	0		TM C	50 GRABS	01	03
WH1461	07-JUL-88	SO	SOIL. ROW 1. EAST. 500-750 FEET. EAST ROCKY BRANCH	0-3 in.	0		TM C	50 GRABS	01	03
WH1462	07-JUL-88	LI	LIQUID. HEXANE. TRIP BLANK		0	QBL	TM C	NA	01	03
WH1463	07-JUL-88	SO	SOIL, ROW 2, NORTH, 500-750 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	50 GRABS	03	03
WH1464	07-JUL-88	SO	SOIL. ROW 2, SOUTH. 500-750 FEET. EAST ROCKY BRANCH	0-3 in.	0		TM C	50 GRABS	03	03
WH1465	07-JUL-88	SO	SOIL. ROW 2, EAST. 500-750 FEET EAST ROCKY BRANCH	0-3 in.	0		TM C	50 GRABS	03	03
WH1466	07-JUL-88	SO	SOIL. ROW 1, NORTH. 750-1000 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	47 GRABS	01	03
WH1467	08 JUL 88	SO	SOIL, ROW 1, SOUTH, 750-1000 FEET. EAST ROCKY BRANCH	0-3 in	0	DRIG WH1468	TM C	47 GRABS	01	03
WH1468	08-JUL-88	SO	SOIL, ROW 1. SOUTH. 750-1000 FEET. EAST ROCKY BRANCH	0-3 in.	0	QDU WH1467	TM C	47 GRABS	01	03
WH1469	08 JUL-88	SO	SOIL, ROW 1, EAST. 750-1000 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	47 GRABS	01	03
WH1470	08-JUL-88	SO	SOIL. ROW 2. EAST. 750-1000 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	41 GRABS	03	03
WH1471	08 JUL-88	SO	SOIL BLANK		0	QBL	TM C	NA	01	03
WH1472	08-JUL-88	SO	SOIL, ROW 2, NORTH. 750-1000 FEET. EAST ROCKY BRANCH	0-3 in	0		TM C	41 GRABS	03	03
WH1473	08-JUL-88	SO	SOIL, ROW 2, SOUTH 750-1000 FEET. EAST ROCKY BRANCH	0-3 in.	0		TM C	41 GRABS	03	03
WH1474	08-JUL-88	SO	SOIL. ROW 1, EAST. 1000 FT TO 1250 FT. EAST ROCKY BRANCH	0-3 in	0		TM C	46 GRABS	01	03
WH1475	08-JUL-88	SO	SOIL. ROW 1, NORTH 1000 FT TO 1250 FT. EAST ROCKY BRANCH	0-3 in	0		TM C	46 GRABS	01	03
WH1476	08 JUL-88	SO	SOIL, ROW 1, SOUTH 1000 FT TO 1250 FT. EAST ROCKY BRANCH	0 3 in	0		TM C	46 GRABS	01	03

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WH1477	08-JUL-88	SO	SOIL, ROW 2, NORTH, 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	43 GRABS	01	03
WH1478	08-JUL-88	SO	SOIL, ROW 2, SOUTH, 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	43 GRABS	01	03
WH1479	08-JUL-88	SO	SOIL, ROW 2, EAST, 1000 FT TO 1250 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	43 GRABS	01	03
WH1480	08-JUL-88	SO	SOIL, ROW 1, NORTH, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in.	0			TM	C	46 GRABS	01	03
WH1481	08-JUL-88	SO	SOIL, ROW 1, SOUTH 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	46 GRABS	01	03
WH1482	08-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE.		0	QRI		TM	C	NA	01	03
WH1483	08-JUL-88	SO	SOIL, ROW 1, EAST, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	46 GRABS	01	03
WH1484	08-JUL-88	SO	SOIL, ROW 2, EAST, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	43 GRABS	03	03
WH1485	08-JUL-88	SO	SOIL, ROW 2, NORTH, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	43 GRABS	03	03
WH1486	08-JUL-88	SO	SOIL, ROW 2, SOUTH, 1250 FT TO 1500 FT, EAST ROCKY BRANCH	0-3 in.	0			TM	C	43 GRABS	03	03
WH1487	09-JUL-88	SO	SOIL, ROW 2, NORTH, 1500 FT TO 1750 FT, EAST ROCKY BRANCH	0-3 in.	0			TM	C	50 GRABS	03	03
WH1488	09 JUL-88	SO	SOIL, ROW 2, SOUTH, 1500 FT TO 1750 FT EAST ROCKY BRANCH	0-3 in.	0			TM	C	50 GRABS	03	03
WH1489	09-JUL-88	SO	SOIL, ROW 2, EAST 1500 FT TO 1750 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	50 GRABS	03	03
WH1490	09 JUL 88	SO	SOIL, ROW 1, EAST, 1500 FT TO 1750 FT EAST ROCKY BRANCH	0-3 in	0	ORIG	WH1493	TM	C	48 GRABS	01	03
WH1491	09-JUL-88	SO	SOIL, ROW 1, SOUTH, 1500 FT TO 1750 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	48 GRABS	01	03
WH1492	09-JUL-88	SO	SOIL, ROW 1, NORTH, 1500 FT TO 1750 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	48 GRABS	01	03
WH1493	09-JUL-88	SO	SOIL, ROW 1, EAST, 1500 FT TO 1750 FT, EAST ROCKY BRANCH	0-3 in	0	QDU	WH1490	TM	C	48 GRABS	01	03
WH1494A	09-JUL-88	SO	SOIL, ROW 1, EAST.1500-1750 FT.EAST R BRANCH, A QUAD MIX CHECK	0-3 in	0	QDM	WH1490	TM	C	48 GRABS	01	03
WH1495B	09-JUL-88	SO	SOIL, ROW 1, EAST,1500-1750 FT EAST R. BRANCH B QUAD MIX CHECK	0-3 in	0	QDM	WH1490	TM	C	48 GRABS	01	03
WH1496C	09-JUL-88	SO	SOIL, ROW 1, EAST.1500-1750 FT.EAST R BRANCH.C QUAD MIX CHECK	0-3 in	0	QDM	WH1490	TM	C	48 GRABS	01	03
WH1497D	09-JUL-88	SO	SOIL, ROW 1, EAST.1500-1750 FT.EAST R BRANCH.D QUAD MIX CHECK	0-3 in	0	QDM	WH1490	TM	C	48 GRABS	01	03
WH1498	09-JUL-88	SO	SOIL, ROW 1, EAST, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	26 GRABS	01	03
WH1499	09-JUL-88	SO	SOIL, ROW 1, NORTH, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in.	0			TM	C	26 GRABS	01	03
WH2000	09-JUL-88	SO	SOIL ROW 1, SOUTH, 1750 FT TO 1880 FT EAST ROCKY BRANCH	0-3 in	0			TM	C	26 GRABS	01	03
WH2001	09-JUL-88	SO	SOIL, ROW 2, EAST, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in	0			TM	C	26 GRABS	03	03

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WH2002	09-JUL-88	SO	SOIL, ROW 2, NORTH, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in.	0			TM C	26 GRABS	03	03
WH2003	09 JUL-88	SO	SOIL, ROW 2, SOUTH, 1750 FT TO 1880 FT, EAST ROCKY BRANCH	0-3 in	0			TM C	26 GRABS	03	03
WH2004	09-JUL-88	SO	SOIL ROW 1, NORTH, 250-500 FEET, EAST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2005	09-JUL-88	SO	SOIL, ROW 1, SOUTH, 250-500 FEET, EAST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2006	09-JUL-88	SO	SOIL, ROW 1, EAST 250-500 FEET, EAST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2007	09-JUL-88	SO	SOIL, ROW 2, NORTH, 250-500 FEET, EAST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	03	03
WH2008	09-JUL-88	SO	SOIL ROW 2, SOUTH, 250 [illegible]00 FEET, EAST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	03	03
WH2009	09-JUL-88	SO	SOIL, ROW 2, EAST, 250-500 FEET, EAST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	03	03
WH2010	09-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE.		0	QRI		TM A	NA	01	03
WH2011	10-JUL-88	SO	SOIL,2510-2940 FT,12 IN ABOVE WATER EAST ROCKY BRANCH, LEFT BANK	0-3 in	.5			TM A	37 GRABS	03	03
WH2012	10-JUL-88	SO	SOIL,2010-2500 FT,12 IN ABOVE WATER EAST ROCKY BRANCH, RIGHT BANK.	0-3 in.	.5			TM A	50 GRABS	03	03
WH2013	10 JUL-88	SO	SOIL,2510-2940 FT,36 IN ABOVE WATER EAST ROCKY BRANCH, LEFT BANK	0-3 in.	3			TM A	37 GRABS	03	03
WH2014	10-JUL-88	SO	SOIL,2010-2500 FT,36 IN ABOVE WATER EAST ROCKY BRANCH, RIGHT BANK.	0-3 in	3			TM A	50 GRABS	03	03
WH2015	10 JUL-88	SO	SOIL, BLANK		0	QBL		TM A	NA	01	03
WH2016	10-JUL-88	SO	SOIL,2510-2940 FT,6 IN ABOVE WATER, EAST ROCKY BRANCH RIGHT BANK	0-3 in	.5			TM A	37 GRABS	01	03
WH2017	10 JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE		0	QRI		TM C	NA	01	03
WH2018	10-JUL-88	SO	SOIL,2510-2940 FT 12 IN ABOVE WATER EAST ROCKY BRANCH, RIGHT BANK	0-3 in.	1			TM A	37 GRABS	01	03
WH2019	10-JUL-88	SO	SOIL, ROW 2, WEST, 0-250 FT WEST ROCKY BRANCH	0-3 in	0			TM C	51 GRABS	01	03
WH2020	10-JUL-88	SO	SOIL,2510-2940 FT,36 IN ABOVE WATER EAST ROCKY BRANCH, RIGHT BANK	0-3 in	3			TM A	37 GRABS	03	03
WH2021	10 JUL-88	SO	SOIL, ROW 2, NORTH, 0-250 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	51 GRABS	01	03
WH2022	10-JUL-88	SO	SOIL, ROW 2, SOUTH 0-250 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	51 GRABS	01	03
WH2023	10-JUL-88	SO	SOIL, ROW 1, NORTH 0-250 FT WEST ROCKY BRANCH	0-3 in	0			TM C	53 GRABS	01	03
WH2024	10-JUL-88	SO	SOIL, ROW 1, WEST, 0-250 FT WEST ROCKY BRANCH	0-3 in	0			TM C	53 GRABS	01	03
WH2025	10-JUL-88	SO	SOIL, ROW 1, SOUTH, 0-250 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	53 GRABS	01	03
WH2026	11-JUL-88	SO	SOIL, OLD SLUDGE DRYING BEDS, OLD TREATMENT PLANT	0-3 in	0	ORIG	WH2027	TM EI	73 GRABS	01	03

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WH2027	11-JUL-88	SO	SOIL, OLD SLUDGE DRYING BEDS, OLD TREATMENT PLANT	0-3 in	0	QDU	WH2026	TM	E1	73 GRABS	01	03
WH2028	11-JUL-88	SO	SOIL, OLD SLUDGE DRYING BEDS, OLD TREATMENT PLAN EPA SPLIT	0-3 in	0	SPLT	WH2026	TM	E1	73 GRABS	04	03
WH2029	11-JUL-88	SO	SOIL, PERIMETER OF OLD DRYING BEDS, OLD TREATMENT PLANT	0-3 in	0			TM	E1	66 GRABS	01	03
WH2030	11-JUL-88	SO	SOIL, AREA AROUND THE CLARIFIERS AT THE OLD SEWAGE TREATMENT PLANT	0-3 in.	0			TM	E2	39 GRABS	01	03
WH2031	11 JUL 88	SO	SOIL, ROW 1, NORTH, 250-500 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	50 GRABS	01	03
WH2032	11-JUL-88	SO	SOIL, ROW 1, SOUTH, 250-500 FEET WEST ROCKY BRANCH	0-3 in.	0			TM	C	50 GRABS	01	03
WH2033	11-JUL-88	SO	SOIL, ROW 1, WEST, 250-500 FEET. WEST ROCKY BRANCH	0-3 in.	0			TM	C	50 GRABS	01	03
WH2034	11-JUL-88	SO	SOIL, ROW 2, WEST, 250-500 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	50 GRABS	01	03
WH2035	11-JUL-88	SO	SOIL, ROW 2, NORTH, 250-500 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	50 GRABS	01	03
WH2036	11-JUL-88	SO	SOIL, ROW 2, SOUTH, 250-500 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	50 GRABS	01	03
WH2037	11-JUL-88	SO	SOIL, ROW 1, NORTH, 500-750 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	48 GRABS	01	03
WH2038	11-JUL-88	SO	SOIL, ROW 1, SOUTH 500-750 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	48 GRABS	01	03
WH2039	11 JUL-88	SO	SOIL, ROW 1, WEST, 500-750 FEET. WEST ROCKY BRANCH	0-3 in.	0	ORIG	WH2040	TM	C	48 GRABS	01	03
WH2040	11-JUL-88	SO	SOIL, ROW 1, WEST 500-750 FEET. WEST ROCKY BRANCH	0-3 in	0	QDU	WH2039	TM	C	48 GRABS	01	03
WH2041	11-JUL-88	SO	SOIL, ROW 1, WEST 500-750 FEET. W ROCKY BRANCH, EPA SPLIT.	0-3 in.	0	SPLT	WH2039		C	48 GRABS	04	03
WH2042	11-JUL-88	SO	SOIL, ROW 2, SOUTH, 500-750 FEET WEST ROCKY BRANCH	0-3 in	0			TM	C	45 GRABS	01	03
WH2043	11-JUL-88	SO	SOIL, ROW 2, WEST 500-750 FEET WEST ROCKY BRANCH	0-3 in	0			TM	C	45 GRABS	01	03
WH2044	11-JUL-88	SO	SOIL, ROW 2, NORTH, 500-750 FEET. WEST ROCKY BRANCH	0-3 in	0			TM	C	45 GRABS	01	03
WH2045	11-JUL-88	SE	SEDIMENT, EAST ROCKY BRANCH AT 1704 HILL ROAD PROPERTY LINE	grab	- 25	ORIG	WH2046	TM	B	NA	01	03
WH2046	11-JUL-88	SE	SEDIMENT, EAST ROCKY BRANCH AT 1704 HILL ROAD PROPERTY LINE	grab	- 25	QDU	WH2045	TM	B	NA	01	03
WH2047	13-JUL-88	SE	SEDIMENT, EAST ROCKY BRANCH AT 1704 HILL ROAD PROPERTY LINE, EPA SPLIT	0-1 in	- 25	SPLT	WH2045		B	NA	04	03
WH2048	11-JUL-88	LI	LIQUID, HEXANE, TRIP BLANK		0	QBL		TM	C	NA	01	03
WH2049	13-JUL-88	SO	SOIL, MANHOLE #2734,EAST,608 OAKLEY LANE	0-3 in	0			TM	C	8 GRABS	01	03
WH2050	13-JUL-88	SO	SOIL,MANHOLE #2734,SOUTH,608 OAKLEY LANE	0-3 in	0			TM	C	8 GRABS	01	03
WH2051	13-JUL-88	SO	SOIL, BLANK		0	QBL		TM	C	NA	01	03

TABLE KEY

QC - Quality Control

QRI - Rinse
QBL - Blank
ORIG - Original
QDU - Duplicate
SPLT - Split
QDM - Mix Check

LB - Lab

TM - TMS Analytical Services
Indianapolis, IN

MK - IT Analytical Services
Middlebrook Pike
Knoxville, TN

Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2052	13-JUL-88	SO	SOIL. MANHOLE #2734,WEST.608 OAKLEY LANE	0-3 in	0		TM	C	8 GRABS	01	03
WH2053	13 JUL 88	SO	SOIL ROW 1, SOUTH, 750-930 FEET. WEST ROCKY BRANCH	0-3 in	0		TM	C	36 GRABS	01	03
WH2054	13-JUL-88	SO	SOIL, ROW 1, NORTH, 750-930 FEET WEST ROCKY BRANCH	0-3 in	0	ORIG MIX	TM	C	36 GRABS	01	03
WH2055A	13-JUL-88	SO	SOIL, ROW 1, NORTH 750-930 FEET. W. ROCKY BRANCH,MIX CHECK A	0-3 in	0	QDM WH2054	TM	C	36 GRABS	01	03
WH2056B	13-JUL-88	SO	SOIL, ROW 1, NORTH, 750-930 FEET. W ROCKY BRANCH MIX CHECK B	0-3 in	0	QDM WH2054	TM	C	36 GRABS	01	03
WH2057C	13-JUL-88	SO	SOIL, ROW 1, NORTH, 750-930 FEET. W ROCKY BRANCH,MIX CHECK C	0-3 in	0	QDM WH2054	TM	C	36 GRABS	01	03
WH2058D	13-JUL-88	SO	SOIL, ROW 1, NORTH, 750-930 FEET. W ROCKY BRANCH,MIX CHECK D	0-3 in.	0	QDM WH2054	TM	C	36 GRABS	01	03
WH2059	13-JUL-88	SO	SOIL, ROW 1, WEST, 750-930 FEET. WEST ROCKY BRANCH	0-3 in	0		TM	C	36 GRABS	01	03
WH2060	13-JUL-88	SO	SOIL, ROW 2, WEST, 750-930 FEET. WEST ROCKY BRANCH	0-3 in	0		TM	C	36 GRABS	01	03
WH2061	13-JUL-88	SO	SOIL, ROW 2, NORTH, 750-930 FEET. WEST ROCKY BRANCH	0-3 in	0		TM	C	36 GRABS	01	03
WH2062	13-JUL-88	LI	EQUIPMENT RINSE HEXANE		0	QRI	TM	C	NA	01	03
WH2063	13-JUL-88	SO	SOIL, ROW 2, SOUTH, 750-930 FEET. WEST ROCKY BRANCH	0-3 in.	0		TM	C	36 GRABS	01	03
WH2064	13-JUL-88	SO	SOIL, BLANK		0	QBL	TM	C	NA	01	03
WH2065	13-JUL-88	SO	SOIL, ROW 1, WEST, 2113 WEST LANE	0-3 in	0	ORIG WH2066	TM	C	25 GRABS	01	03
WH2066	13-JUL-88	SO	SOIL, ROW 1, WEST, 2113 WEST LANE	0-3 in	0	QDU WH2065	TM	C	26 GRABS	01	03
WH2067	13-JUL-88	SO	SOIL, ROW 1, NORTH, 2113 WEST LANE	0-3 in	0		TM	C	26 GRABS	01	03
WH2068	13-JUL-88	SO	SOIL, ROW 1, SOUTH, 2113 WEST LANE	0-3 in	0		TM	C	26 GRABS	01	03
WH2069	13-JUL-88	SO	SOIL, ROW 2, WEST, 2113 WEST LANE	0-3 in	0		TM	C	22 GRABS	03	03
WH2070	13-JUL-88	SO	SOIL, ROW 2, NORTH, 2113 WEST LANE	0-3 in	0		TM	C	22 GRABS	03	03
WH2071	13-JUL-88	SO	SOIL, ROW 2, SOUTH 2113 WEST LANE	0-3 in	0		TM	C	22 GRABS	03	03
WH2072	13-JUL-88	LI	LIQUID, HEXANE, TRIP BLANK		0	QBL	TM	C	NA	01	03
WH2073	14-JUL-88	SO	SOIL, ROW 1, WEST, 2111 WEST LANE	0-3 in	0		TM	C	11 GRABS	01	03
WH2074	14-JUL-88	SO	SOIL, ROW 1, NORTH, 2111 WEST LANE	0-3 in	0		TM	C	11 GRABS	01	03
WH2075	14-JUL-88	SO	SOIL, ROW 1, SOUTH, 2111 WEST LANE	0-3 in	0		TM	C	11 GRABS	01	03
WH2076	14-JUL-88	SO	SOIL ROW 2 WEST 2111 WEST LANE	0-3 in	0		TM	C	14 GRABS	03	03

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Knoxville, TN

Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2077	14-JUL-88	SO	SOIL, ROW 2, SOUTH, WEST LANE	0-3 in	0			TM C	14 GRABS	03	03
WH2078	14-JUL-88	SO	SOIL, ROW 2 NORTH 2111 WEST LANE	0-3 in	0			TM C	14 GRABS	03	03
WH2079	14-JUL-88	SO	SOIL BLANK.		0	QBL		TM C	NA	01	03
WH2080	14-JUL-88	SO	SOIL, ROW 1, NORTH 2112 WEST LANE.	0-3 in	0			TM C	15 GRABS	01	03
WH2081	14-JUL-88	SO	SOIL, ROW 1, SOUTH, 2112 WEST LANE	0-3 in	0			TM C	15 GRABS	01	03
WH208_	14-JUL-88	SO	SOIL, ROW 1, WEST, 2112 WEST LANE	0-3 in	0			TM C	15 GRABS	01	03
WH2083	14-JUL-88	SO	SOIL, ROW 2, SOUTH 2112 WEST LANE	0-3 in	0			TM C	22 GRABS	01	03
WH2084	14-JUL-88	SO	SOIL, ROW 2, WEST, 2112 WEST LANE.	0-3 in.	0			TM C	22 GRABS	01	03
WH2085	14-JUL-88	SO	SOIL, ROW 2, NORTH, 2112 WEST LANE	0-3 in.	0			TM C	22 GRABS	01	03
WH2086	14-JUL-88	SO	SOIL, ROW 1, WEST, 2203 BRADEN.	0-3 in	0			TM C	46 GRABS	01	03
WH2087	14-JUL-88	SO	SOIL, ROW 1, NORTH, 2203 BRADEN	0-3 in	0			TM C	46 GRABS	01	03
WH2088	14-JUL-88	SO	SOIL, ROW 1, SOUTH, 2203 BRADEN	0-3 in.	0			TM C	46 GRABS	01	03
WH2089	14-JUL-88	SO	SOIL ROW 2, NORTH, 2203 BRADEN	0-3 in	0			TM C	35 GRABS	01	03
WH2090	14-JUL-88	SO	SOIL, ROW 2, WEST 2203 BRADEN	0-3 in.	0			TM C	35 GRABS	01	03
WH2091	14-JUL-88	SO	SOIL, ROW 2, SOUTH, 2203 BRADEN	0-3 in	0			TM C	35 GRABS	01	03
WH2092	14-JUL-88	SO	SOIL, ROW 1, WEST, 2202 BRADEN	0-3 in.	0	ORIG	WH2093	TM C	49 GRABS	01	03
WH2093	14-JUL-88	SO	SOIL, ROW 1, WEST, 2202 BRADEN	0-3 in.	0	ODU	WH2092	TM C	49 GRABS	01	03
WH2094	14-JUL-88	SO	SOIL, ROW 1, NORTH, 2202 BRADEN	0-3 in	0			TM C	49 GRABS	01	03
WH2095	14-JUL-88	SO	SOIL, ROW 1, WEST, 2202 BRADEN, EPA SPLIT	0-3 in	0	SPLT	WH2092	C	49 GRABS	04	03
WH2096	15-JUL-88	SO	SOIL, ROW 1, SOUTH, 2202 BRADEN	0-3 in.	0			TM C	49 GRABS	01	03
WH2097	15-JUL-88	SO	SOIL, ROW 2, NORTH, 2202 BRADEN	0-3 in	0			TM C	44 GRABS	01	03
WH2098	15-JUL-88	SO	SOIL, ROW 2, WEST, 2202 BRADEN	0-3 in	0			TM C	44 GRABS	01	03
WH2099	15-JUL-88	SO	SOIL, ROW 2, SOUTH, 2202 BRADEN	0-3 in	0			TM C	44 GRABS	01	03
WH2100	15-JUL-88	SO	SOIL, BLANK		0	QBL		TM C	NA	01	03
WH2101	14-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE			ORI		TM C	2 RINSES	01	03

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Sample Status

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03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD;
2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2102	14-JUL-88	LI	LIQUID, HEXANE, TRIP BLANK			QBL		TM C	NA	01	03
WH2103	15 JUL 88	SO	SOIL, ROW 1, WEST 618 ALTA COVE	0-3 in	0	ORIG	WH2104	TM C	44 GRABS	01	03
WH2104	15-JUL-88	SO	SOIL, ROW 1, WEST, 618 ALTA COVE.	0-3 in	0	ODU	WH2103	TM C	44 GRABS	01	03
WH2105	15-JUL-88	SO	SOIL, ROW 1, WEST 618 ALTA COVE EPA SPLIT	0-3 in	0	SPLT	WH2103	C	44 GRABS	04	03
WH2106	15 JUL 88	SO	SOIL, ROW 1, NORTH 618 ALTA COVE.	0-3 in	0			TM C	44 GRABS	01	03
WH2107	15-JUL-88	SO	SOIL, ROW 1, SOUTH 618 ALTA COVE	0-3 in	0			TM C	44 GRABS	01	03
WH2108	15-JUL-88	SO	SOIL, ROW 2 WEST. 618 ALTA COVE	0-3 in	0			TM C	40 GRABS	01	03
WH2109	15-JUL-88	SO	SOIL, ROW 2, NORTH. 618 ALTA COVE	0-3 in	0			TM C	40 GRABS	01	03
WH2110	15-JUL-88	SO	SOIL, ROW 2 SOUTH 618 ALTA COVE	0-3 in	0			TM C	40 GRABS	01	03
WH2111	15-JUL-88	SO	SOIL, ROW 1, NORTH 620 ALTA COVE.	0 3 in	0			TM C	33 GRABS	01	03
WH2112	15-JUL-88	SO	SOIL, ROW 1 WEST 620 ALTA COVE	0-3 in	0			TM C	33 GRABS	01	03
WH2113	15-JUL-88	SO	SOIL, ROW 1, SOUTH. 620 ALTA COVE.	0-3 in	0			TM C	33 GRABS	01	03
WH2114	15-JUL-88	SO	SOIL, ROW 2, WEST 620 ALTA COVE	0-3 in	0			TM C	34 GRABS	03	03
WH2115	15-JUL-88	SO	SOIL, ROW 2, NORTH. 620 ALTA COVE	0-3 in	0			TM C	34 GRABS		03
WH2116	15 JUL 88	SO	SOIL ROW 2 SOUTH 620 ALTA COVE.	0-3 in	0			TM C	34 GRABS	03	03
WH2117	15-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE		0	QRI		TM C	NA	01	03
WH2118	16 JUL 88	SO	SOIL, MOUND OF DIRT AT FENCE CORNER BETWEEN APT.PLAYGROUND & RR, EAST	0-3 in.	1	5		TM C	25 GRABS	01	03
WH2119	16-JUL-88	SO	SOIL MOUND OF DIRT ON EAST BANK OF ROCKY BRANCH AT MAIN STREET BRIDGE	0-3 in	3	5		TM O	36 GRABS	01	03
WH2120	16-JUL-88	SO	SOIL, SOUTH MANHOLE #2745.1704 HILL ST	0-3 in	0			TM C	36 GRABS	01	03
WH2121	16-JUL-88	SO	SOIL, WEST.MANHOLE #2745 1704 HILL ST	0-3 in	0			TM C	36 GRABS	01	03
WH2122	16-JUL-88	SO	SOIL, EAST.MANHOLE #2745 1704 HILL ST	0-3 in	0			TM C	36 GRABS	01	03
WH2123	16-JUL 88	SO	SOIL, ROW 1, SOUTH. 1704 HILL ROAD	0-3 in	0			TM C	31 GRABS	01	03
WH2124	16-JUL-88	SO	SOIL, ROW 1, EAST 1704 HILL ROAD	0-3 in	0			TM C	31 GRABS	01	03
WH2125	16-JUL 88	SO	SOIL, ROW 1, NORTH 1704 HILL ROAD	0-3 in	0			TM C	31 GRABS	01	03
WH2126	16-JUL-88	SO	SOIL ROW 2 SOUTH 1704 HILL ROA	0-3 in	0			TM C	32 GRABS	01	03

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Sample Status

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03 - Hold
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Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2127	16-JUL-88	SO	SOIL, ROW 2, NORTH 1704 HILL ROAD	0-3 in	0			TM	C	32 GRABS	01	03
WH2128	16-JUL-88	SO	SOIL, ROW 2, EAST, 1704 HILL ROAD	0-3 in	0			TM	C	32 GRABS	01	03
WH2129	16 JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE.		0	QRI		TM	C	NA	LO	03
WH2130	17-JUL-88	SE	SEDIMENT,NORTH #1 QUAD,LAKE DUPREE	grab	-6			TM	I	6 GRABS	01	03
WH2131	17-JUL-88	SE	SEDIMENT, #2 QUAD, LAKE DUPREE.	grab	-6			TM	I	6 GRABS	01	03
WH2132	17-JUL-88	SE	SEDIMENT, #3 QUAD, LAKE DUPREE	grab	-6			TM	I	6 GRABS	01	03
WH2133	17 JUL 88	SE	SEDIMENT,SOUTH #4 QUAD,LAKE DUPREE	grab	-6			TM	I	6 GRABS	01	03
WH2134	17-JUL-88	SO	SOIL, PERIMETER OF OXIDATION PONDS	0-3 in	0			TM	G	58 GRABS	01	03
WH2135	17-JUL-88	SO	SOIL, AERATION BASIN PERIMETER	0-3 in	0			TM	F	83 GRABS	01	03
WH2136	17 JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE.		0	QRI		TM	F	NA	LO	03
WH2137	18-JUL-88	SO	SOIL, ROW 1, SOUTH 1703 HILL ROAD EAST ROCKY BRANCH,	0-3 in	0			TM	C	33 GRABS	01	03
WH2138	18 JUL-88	SO	SOIL, ROW 1, NORTH, 1703 HILL ROAD, EAST ROCKY BRANCH	0-3 in	0			TM	C	33 GRABS	01	03
WH2139	18-JUL-88	SO	SOIL, ROW 1, EAST, 1703 HILL ROAD, EAST ROCKY BRANCH	0-3 in	0			TM	C	33 GRABS	01	03
WH2140	18-JUL-88	SO	SOIL ROW 2, NORTH 1703 HILL ROAD, EAST ROCKY BRANCH	0-3 in	0			TM		34 GRABS	03	03
WH2141	18-JUL-88	SO	SOIL, ROW 2, SOUTH, 1703 HILL ROAD, EAST ROCKY BRANCH	0-3 in	0			TM	C	34 GRABS	03	03
WH2142	18-JUL-88	SO	SOIL, ROW 2, EAST, 1703 HILL ROAD, EAST ROCKY BRANCH	0-3 in.	0			TM	C	34 GRABS	03	03
WH2143	18-JUL-88	SO	SOIL ROW 1, NORTH, 629 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0			TM	C	13 GRABS	01	03
WH2144	18-JUL-88	SO	SOIL, ROW 1 EAST, 629 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0			TM	C	13 GRABS	01	03
WH2145	18 JUL 88	SO	SOIL, ROW 2, EAST, 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	16 GRABS	03	03
WH2146	18-JUL-88	SO	SOIL ROW 1, SOUTH 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	13 GRABS	01	03
WH2147	18-JUL-88	SO	SOIL, ROW 2, NORTH, 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	16 GRABS	03	03
WH2148	18-JUL-88	SO	SOIL, ROW 2, SOUTH, 629 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	16 GRABS	03	03
WH2149	18-JUL-88	SO	SOIL ROW 1, SOUTH 625 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0	ORIG	WH2156	TM	C	26 GRABS	01	03
WH2150	18-JUL-88	SO	SOIL, ROW 1 NORTH 625 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	26 GRABS	01	03
WH2151	18 JUL 88	SO	SOIL, ROW 1, EAST 625 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0	ORIG	WH2152A	TM	C	26 GRABS	01	03

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03 - Hold
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LO - Sample Lost in Transport

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
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TABLE A 1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB	AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2152A	18-JUL-88	SO	SOIL, ROW 1, EAST, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH MIX CK A	0-3 in	0	QDM	WH2151	TM	C	26 GRABS	01	03
WH2153B	18-JUL-88	SO	SOIL, ROW 1, EAST, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH MIX CK B	0-3 in	0	QDM	WH2151	TM	C	26 GRABS	01	03
WH2154C	18-JUL-88	SO	SOIL, ROW 1, EAST 625 BROOKHAVEN COURT, EAST ROCKY BRANCH, MIX CK C	0-3 in	0	QDM	WH2151	TM	C	26 GRABS	01	03
WH2155D	18-JUL-88	SO	SOIL, ROW 1, EAST, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH, MIX CK D	0-3 in	0	QDM	WH2151	TM	C	26 GRABS	01	03
WH2156	18-JUL-88	SO	SOIL, ROW 1, SOUTH 625 BROOKHAVEN CT,E ROCKY BRANCH DUPLICATE WH2149	0-3 in	0	QDU	WH2149	TM	C	26 GRABS	01	03
WH2157	18-JUL-88	SO	SOIL, ROW 1, SOUTH, 625 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0	QDU	WH2156	TM	C	26 GRABS	01	03
WH2158	18-JUL-88	SO	SOIL, ROW 1,EAST 625 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0	QDU	WH2151	TM	C	26 GRABS	01	03
WH2159	18-JUL-88	SO	SOIL, ROW 2, NORTH, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	25 GRABS	03	03
WH2160	18-JUL-88	SO	SOIL, ROW 2, EAST, 625 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0			TM	C	25 GRABS	03	03
WH2161	18-JUL-88	SO	SOIL, ROW 2, SOUTH, 625 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	25 GRABS	03	03
WH2162	18-JUL-88	SO	SOIL, ROW 1, NORTH, 621 BROOKHAVEN COURT EAST ROCKY BRANCH	0-3 in	0			TM	C	14 GRABS	01	03
WH2163	18-JUL-88	SO	SOIL, ROW 1, EAST, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	14 GRABS	01	03
WH2164	18-JUL-88	SO	SOIL, ROW 1, SOUTH, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	9 GRABS	01	03
WH2165	18-JUL-88	SO	SOIL, ROW 2, EAST, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	9 GRABS	03	03
WH2166	18-JUL-88	SO	SOIL FIELD BLANK		0	QBL		TM	C	NA	01	03
WH2167	18-JUL-88	SO	SOIL, ROW 2, NORTH, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	9 GRABS	03	03
WH2168	18-JUL-88	SO	SOIL, ROW 2, SOUTH, 621 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	9 GRABS	03	03
WH2169	18-JUL-88	SO	SOIL, ROW 1 EAST, 617 BROOKHAVEN COUBT EAST ROCKY BRANCH	0-3 in	0			TM	C	14 GRABS	01	03
WH2170	18-JUL-88	SO	SOIL, ROW 1, NORTH, 617 BROOKHAVEN COURT, EAST ROCKY BRANCH	0-3 in	0			TM	C	14 GRABS	01	03
WH2171	18-JUL-88	LI	LIQUID HEXANE, EQUIPMENT RINSE		0	ORI		TM	C	NA	01	03
WH2172	18-JUL-88	LI	LIQUID HEXANE, TRIP BLANK			QBL		TM		NA	LO	03
WH2173	19-JUL-88	SO	SOIL, ROW 1, SOUTH 617 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2174	19-JUL-88	SO	SOIL ROW 2, NORTH 617 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2175	19 JUL-88	SO	SOIL ROW 2 EAST 617 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2176	19-JUL-88	SO	SOIL ROW 2, SOUTH 617 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03

TABLE KEY

QC - Quality Control

- ORI - Rinse
- QBL - Blank
- ORIG - Original
- QDU - Duplicate
- SPLT - Split
- QDM - Mix Check

LB - Lab

TM - TMS Analytical Services
Indianapolis, IN

MK - IT Analytical Services
Middlebrook Pike
Knoxville, TN

Sample Status

- 01 - Rush
- 02 - Analyze (no rush)
- 03 - Hold
- 04 - EPA Split
- LO - Sample Lost in Transport

Analysis Request

- 03 - TCDD; 2,3,7,8-TCDD
- 04 - Other Anal[illegible]l Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB	AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2177	19-JUL-88	SO	SOIL, ROW 1, NORTH 613 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2178	19-JUL-88	SO	SOIL, ROW 1, SOUTH 613 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2179	19-JUL-88	SO	SOIL, ROW 1, EAST, 613 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2180	19-JUL-88	SO	SOIL, ROW 2, SOUTH, 613 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2181	19-JUL-88	SO	SOIL, ROW 2, EAST, 613 BROOKHAVEN COURT	0-3 in	0			TM		14 GRABS	03	03
WH2182	19-JUL-88	SO	SOIL, ROW 2, NORTH, 613 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2183	19-JUL-88	SO	SOIL, ROW 1, EAST, 609 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2184	19-JUL-88	SO	SOIL, ROW 1, NORTH, 609 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2185	19-JUL-88	SO	SOIL, ROW 1, SOUTH, 609 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2186	19-JUL-88	SO	SOIL, ROW 2, NORTH, 609 BROOKHAVEN COURT	0-3 in	0			TM	C	13 GRABS	03	03
WH2187	19-JUL-88	SO	SOIL, ROW 2, SOUTH, 609 BROOKHAVEN COURT	0-3 in	0			TM	C	13 GRABS	03	03
WH2188	19-JUL-88	SO	SOIL, ROW 2, EAST, 609 BROOKHAVEN COURT	0-3 in	0			TM	C	13 GRABS	03	03
WH2189	19-JUL-88	SO	SOIL, ROW 1, EAST, 605 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2190	19 JUL-88	SO	SOIL, ROW 1, NORTH, 605 BROOKHAVEN COURT	0-3 in	0	ORIG	WH2191	TM	C	14 GRABS	01	03
WH2191	19-JUL-88	SO	SOIL, ROW 1, NORTH, 605 BROOKHAVEN COURT	0-3 in	0	QDU	WH2190	TM	C	14 GRABS	01	03
WH2192	19-JUL-88	SO	SOIL, ROW 1, NORTH, 605 BROOKHAVEN COURT, EPA SPLIT	0-3 in	0	SPLT	WH2190		C	14 GRABS	04	03
WH2193	19-JUL-88	SO	SOIL, ROW 1, SOUTH 605 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2194	19-JUL-88	SO	SOIL, ROW 2, NORTH, 605 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2195	19-JUL-88	SO	SOIL, ROW 2, EAST, 605 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2196	19-JUL-88	SO	SOIL, ROW 2, SOUTH, 605 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	03	03
WH2197	19-JUL-88	SO	SOIL, ROW 1, EAST, 601 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2198	19 JUL 88	SO	SOIL, ROW 1, SOUTH 601 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2199	19-JUL-88	SO	SOIL, ROW 1, NORTH 601 BROOKHAVEN COURT	0-3 in	0			TM	C	14 GRABS	01	03
WH2200	19-JUL-88	SO	SOIL, ROW 2, EAST 601 BROOKHAVEN COURT	0-3 in	0			TM	C	12 GRABS	03	03
WH2201	19-JUL-88	SO	SOIL ROW 2 NORTH 601 BROOKHAVEN COURT	0-3 in	0			TM	C	12 GRABS	03	03

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Indianapolis, IN

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Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

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NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2202	19-JUL-88	SO	SOIL. ROW 2. SOUTH 601 BROOKHAVEN ROAD	0-3 in	0			TM	C	12 GRABS	03	03
WH2203	19-JUL-88	LI	LIQUID. HEXANE EQUIPMENT RINSE		0	QBI		TM	C	NA	01	03
WH2204	19-JUL-88	SO	SOIL BLANK.		0	QBL		TM	C	NA	01	03
WH2205	19-JUL-88	LI	LIQUID. HEXANE. TRIP BLANK		0	QBL		TM	C	NA	01	03
WH2206	21-JUL-88	SE	SLUDGE. WEST END OF NORTH OXIDATION POND. TOP SEDIMENT/SLUDGE	0-4 in	-3 5			TM	G1	4 GRABS	01	03
WH2206P	21-JUL-88	SE	SLUDGE. WEST END OF NORTH OXIDATION POND. TOP SEDIMENT/SLUDGE	0 4 in	-3 5			MK	G1	4 GRABS	02	04
WH2207	21-JUL-88	CO	SLUDGE WEST END OF NORTH OXIDATION POND. INTERFACE	0-3 in	-5			TM	G1	4 CORINGS	01	03
WH2208	21-JUL-88	SE	SLUDGE. EAST END OF NORTH OXIDATION POND. TOP SEDIMENT/SLUDGE	0-4 in	-3 5			TM	G1	4 GRABS	01	03
WH2208P	21-JUL-88	SE	SLUDGE EAST END OF NORTH OXIDATION POND. TOP SEDIMENT/SLUDGE	0 4 in	-3 5			MK	G1	4 GRABS	02	04
WH2209	21-JUL-88	CO	SLUDGE.EAST HALF OF NORTH OXIDATION POND. INTERFACE	0-3 in	-5	ORIG	WH2210	TM	G1	4 CORINGS	01	03
WH2210	21-JUL-88	CO	SLUDGE.EAST HALF OF NORTH OXIDATION POND INTERFACE	0-3 in	-5	QDU	WH2209	TM	G1	4 CORINGS	01	03
WH2211	21-JUL-88	CO	SLUDGE.EAST HALF OF NORTH OXIDATION POND. INTERFACE. EPA SPLIT	0-3 in	-5	SPLT	WH2209		G1	4 CORINGS	04	03
WH2212	21-JUL-88	CO	SLUDGE WEST END OF SOUTH OXIDATION POND. INTERFACE	0-3 in	-5			TM	G2	4 CORINGS	01	03
WH2213	21 JUL-88	SE	SLUDGE. WEST END OF SOUTH OXIDATION POND TOP SEDIMENT/SLUDGE	0-4 in	-3 5			TM	G2	4 GRABS	01	03
WH2213P	21-JUL-88	SE	SLUDGE WEST END OF SOUTH OXIDATION POND. TOP SEDIMENT/SLUDGE	0-4 in	-3 5			MK	G2	4 GRABS	02	04
WH2214	21-JUL-88	CO	SLUDGE. EAST END OF SOUTH OXIDATION POND INTERFACE	0-3 in	-5			TM	G2	4 CORINGS	01	03
WH2215	21-JUL-88	SE	SLUDGE. EAST END OF SOUTH OXIDATION POND TOP SEDIMENT/SLUDGE	0-4 in	-3.5			TM	G2	4 GRABS	01	03
WH2215P	21-JUL-88	SE	SLUDGE. EAST END OF SOUTH OXIDATION POND TOP SEDIMENT/SLUDGE	0-4 in	-3 5			MK	G2	4 GRABS	02	04
WH2220	22-JUL-88	SE	SLUDGE NORTH QUADRANT OF AERATION BASIN TOP SEDIMENT/SLUDGE	0-2 in	-12			TM	F	6 GRABS	01	03
WH2220P	22 JUL-88	SE	SLUDGE. NORTH QUADRANT OF AERATION BASIN TOP SEDIMENT/SLUDGE	0-2 in	-12			MK	F	6 GRABS	02	04
WH2221	22-JUL-88	SE	SLUDGE NORTH-EAST QUADRANT AERATION BASIN. TOP SEDIMENT/SLUDGE	0-2 in	-12			TM	F	6 GRABS	01	03
WH2221P	22-JUL-88	SE	SLUDGE NORTH-EAST QUADRANT AERATION BASIN. TOP SEDIMENT/SLUDGE	0 2 in	-12			MK	F	6 GRABS	02	04
WH2222	22-JUL-88	SE	SLUDGE SOUTH QUADRANT AERATION BASIN. TOP SEDIMENT/SLUDGE	0-2 in	-12	ORIG	WH2226	TM	F	6 GRABS	01	03
WH2222P	22-JUL-88	SE	SLUDGE. SOUTH QUADRANT AERATION BASIN. TOP SEDIMENT/SLUDGE	0-2 in	-12	ORIG	WH2226	MK	F	6 GRABS	02	04
WH2223	22-JUL-88	SE	SLUDGE,S QUADRANT AERATION BASIN. TOP SEDIMENT/SLUDGE. EPA SPLIT	0 2 in	-12	SPLT	WH2222		F	6 GRABS	04	03

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Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold
04 - EPA Split

Analysis Request

03 - TCDD; 2,3,7,8-TCDD
04 - Other Analytical Parameters

TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2224	22-JUL-88	SE	SLUDGE,SOUTH-WEST QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	0-2 in	-12			TM	F	6 GRABS	01	03
WH2224P	22-JUL-88	SE	SLUDGE,SOUTH-WEST QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	0-2 in	-12			MK	F	6 GRABS	02	04
WH2226	22-JUL-88	SE	SLUDGE, SOUTH QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	0-2 in	-12	QDU	WH2222	TM	F	6 GRABS	01	03
WH2227	22 JUL 88	CO	SLUDGE, NORTH QUADRANT AERATION POND, INTERFACE	0-1 in	-15			TM	F	6 CORINGS	01	03
WH2228	22-JUL-88	CO	SLUDGE,NORTH-EAST QUADRANT,AERATION BASIN, INTERFACE	0-1 in	-15			TM	F	6 CORINGS	01	03
WH2229	22-JUL-88	CO	SLUDGE, SOUTH QUADRANT AERATION BASIN INTERFACE	0-1 in	-15	ORIG	WH2230	TM	F	6 CORINGS	01	03
WH2230	22-JUL-88	CO	SLUDGE SOUTH QUADRANT AERATION BASIN, INTERFACE	0-1 in	-15	QDU	WH2229	TM	F	6 CORINGS	01	03
WH2231	22-JUL-88	CO	SLUDGE, SOUTH QUADRANT AERATION BASIN, INTERFACE EPA SPLIT	0-1 in	-15	SPLT	WH2229		F	6 CORINGS	04	03
WH2232	22-JUL-88	CO	SLUDGE,SOUTH-WEST QUADRANT AERATION BASIN, INTERFACE	0-1 in	-15			TM	F	6 CORINGS	01	03
WH2233	23-JUL-88	SO	SOIL, EAST, 1000-1250 FT, S. ROCKY BR RESAMPLE,ROW 1,EXCEPT DIRT PILE	0-3 in	0			TM	C	43 GRABS	01	03
WH2234	23 JUL 88	SO	SOIL, EAST, 1000-ROAD, E ROCKY BR RESAMPLE, ROW 1, EXCEPT DIRT PILE	0-3 in	0			TM	C	35 GRABS	01	03
WH2235	23-JUL-88	SO	SOIL, EAST, ROAD-1250 FEET, EAST ROCKY BRANCH RESAMPLE ROW 1	0-3 in	0			TM	C	8 GRABS	01	03
WH2236	23-JUL-88	SO	SOIL, WEST, MANHOLE NUMBER 2735 AT 617 OAKLEY	0-3 in	0			TM	C	35 GRABS	01	03
WH2237	23-JUL-88	SO	SOIL, NORTH, MANHOLE NUMBER 2735 AT 617 OAKLEY	0-3 in	0			TM	C	35 GRABS	01	03
WH2238	23-JUL-88	SO	SOIL, SOUTH, MANHOLE NUMBER 2735 AT 617 OAKLEY	0-3 in	0			TM	C	35 GRABS	01	03
WH2239	23-JUL-88	SO	SOIL, SOUTH, MANHOLE NUMBER 2735 AT 617 OAKLEY, EPA SPLIT	0-3 in	0	SPLT	WH2238		C	35 GRABS	04	03
WH2240	23-JUL-88	LI	LIQUID, HEXANE EQUIPMENT RINSE		0	ORI		TM	C	2 RINSES	01	03
WH2240V	23-JUL-88	LI	LIQUID, HEXANE, EQUIPMENT RINSE VERIFICATION ANALYSIS OF WH2240		0	ORI		TM	C	2 RINSES	01	03
WH2241	23 JUL 88	SO	SOIL 2510-2940 FT E ROCKY BRANCH. RESAMPLE 6 IN LEVEL, RIGHT BANK	0-3 in	5			TM	A	30 GRABS	01	03
WH2242	23-JUL-88	SO	SOIL,VACANT LOT AT PARKING AREA NXT TO GATE BETWEEN 3010 & 3018 HINES	0-3 in	0			TM	D	NA	01	03
WH2243	23-JUL-88	SO	SOIL FIELD BEHIND CHURCH ON BRADEN STREET	0-3 in	0			TM	D	NA	01	03
WH2244	25-JUL-88	SO	SOIL, 604 BROOKHAVEN COURT, MIDDLE OF FENCE BETWEEN FENCE & POOL	0-3 in	0			TM	D	NA	01	03
WH2245	25 JUL 88	SO	SOIL 604 CHERYL MIDDLE OF FENCE ACROSS BACKYARD	0 3 in	0			TM	D	NA	01	03
WH2246	25 JUL-88	SO	SOIL 2200 BRADEN 4' NORTH SIDE OF TELEPHONE POLE ON CORNER	0-3 in	0			TM	D	NA	01	03
WH2247	25-JUL-88	SO	SOIL 2111 BRADER, BETWEEN PLANTS & HOUSE 4 FT ON WEST SIDE	0 3 in	0			TM	D	NA	01	03

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Sample Status

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Analysis Request

03 - TCDD; 2,3,7,8-TCDD
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TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2248	25-JUL-88	SO	SOIL, 2111 BRADEN, BETWEEN PLANTS & HOUSE, 4 FT ON WEST SIDE, EPA SPLIT	0-3 in	0	SPLT	WH2247	D	NA	04	03
WH2249	24-JUL-88	SO	SOIL, ROW 3, NORTH, 0-250 FT WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2250	24-JUL-88	SO	SOIL ROW 3, WEST, 0-250 FT. WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2251	24-JUL-88	SO	SOIL, ROW 3, WEST 0 250 FT. WEST ROCKY BRANCH. EPA SPLIT	0-3 in	0	SPLT	WH2250	C	50 GRABS	04	03
WH2252	24-JUL-88	SO	SOIL, ROW 3, SOUTH 0-250 FT WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2253	24-JUL-88	SO	SOIL ROW 4 WEST 0-250 FT. WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	03	03
WH2254	24-JUL-88	SO	SOIL, ROW 4, NORTH 0-250 FT WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	03	03
WH2255	24-JUL-88	SO	SOIL, ROW 4, SOUTH, 0-250 FT. WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	03	03
WH2256	24-JUL-88	LI	LIQUID, HEXANE EQUIPMENT RINSE		0	QRI		TM C	2 RINSES	01	03
WH2257	24-JUL-88	SO	SOIL, ROW 3, NORTH 250-500 FT, WEST ROCKY BRANCH,	0-3 in	0			TM C	50 GRABS	01	03
WH2258	24-JUL-88	SO	SOIL, ROW 3, SOUTH 250-500 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2259	25 JUL 88	SO	SOIL, ROW 3, WEST, 250-500 FT. WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2260	25-JUL-88	SO	SOIL, ROW 4, NORTH 250-500 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2261	25-JUL-88	SO	SOIL, ROW 4, SOUTH, 250-500 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2262	25 JUL 88	SO	SOIL ROW 4, WEST, 250-500 FT WEST ROCKY BRANCH	0-3 in	0			TM C	50 GRABS	01	03
WH2263	25-JUL-88	SO	SOIL, ROW 3, WEST, 500-750 FT. WEST ROCKY BRANCH	0 3 in.	0			TM C	48 GRABS	01	03
WH2264	25-JUL-88	SO	SOIL ROW 3, NORTH 500 750 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	48 GRABS	01	03
WH2265	25 JUL 88	SO	SOIL, ROW 3, WEST 500-750 FT. WEST ROCKY BRANCH EPA SPLIT	0-3 in	0	SPLT	WH2263	C	48 GRABS	04	03
WH2266	24-JUL-88	SO	SOIL, BLANK		0	QBL		TM C	NA	01	03
WH2267	25-JUL 88	SO	SOIL ROW 3 SOUTH 500-750 FT WEST ROCKY BRANCH	0-3 in	0			TM C	48 GRABS	01	03
WH2268	25-JUL-88	SO	SOIL, ROW 4, NORTH 500-750 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	44 GRABS	02	03
WH2269	25-JUL-88	SO	SOIL, ROW 4, WEST 500-750 FT WEST ROCKY BRANCH	0-3 in	0			TM C	44 GRABS	03	03
WH2270	25 JUL 88	SO	SOIL, ROW 4, SOUTH 500-750 FT, WEST ROCKY BRANCH	0-3 in	0			TM C	44 GRABS	03	03
WH2271	25 JUL 88	SO	SOIL ROW 3 WEST 750 930 FT WEST ROCKY BRANCH	0 3 in	0			TM C	30 GRABS	01	03
WH2272	25 JUL 88	SO	SOIL ROW 3 NORTH 750 930 FT WEST ROCKY BRANCH	0 3 in	0			TM C	30 GRABS	01	03

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WH2273	25-JUL-88	SO	SOIL. ROW 3 SOUTH. 750-930 FT WEST ROCKY BRANCH	0-3 in	0			TM	C	30 GRABS	01	03
WH2274	25-JUL-88	SO	SOIL. ROW 4. NORTH 750-930 FT WEST ROCKY BRANCH	0-3 in	0			TM	C	33 GRABS	03	03
WH2275	25-JUL-88	SO	SOIL. ROW 4. SOUTH. 750-930 FT.WEST ROCKY BRANCH	0-3 in	0			TM	C	33 GRABS	03	03
WH2276	25 JUL-88	SO	SOIL. ROW 4. WEST. 750-930 FT. WEST ROCKY BRANCH	0-3 in	0			TM	C	33 GRABS	03	03
WH2277	25 JUL-88	SO	SOIL ROW 3. NORTH 2112 WEST LANE.	0-3 in	0			TM	C	32 GRABS	01	03
WH2278	25-JUL-88	SO	SOIL. ROW 3. SOUTH. 2112 WEST LANE.	0-3 in	0			TM	C	32 GRABS	01	03
WH2279	25-JUL-88	SO	SOIL. ROW 3. SOUTH. 2112 WEST LANE. EPA SPLIT	0-3 in	0	SPLT	WH2278		C	32 GRABS	04	03
WH2280	25-JUL-88	LI	LIQUID HEXANE. EQUIPMENT RINSE		0	QRI		TM	C	2 RINSES	01	03
WH2281	25-JUL-88	LI	LIQUID. HEXANE TRIP BLANK.		0	QBL		TM	C	NA	01	03
WH2282	25-JUL-88	SO	SOIL. ROW 3 WEST 2112 WEST LANE.	0-3 in.	0			TM	C	32 GRABS	01	03
WH2283	25 JUL-88	SO	SOIL. ROW 4. NORTH. 2112 WEST LANE.	0-3 in	0			TM	C	33 GRABS	03	03
WH2284	26-JUL-88	SO	SOIL ROW 4. SOUTH 2112 WEST LANE. WEST ROCKY BRANCH	0-3 in.	0			TM	C	33 GRABS	01	03
WH2285	26-JUL-88	SO	SOIL ROW 4. WEST. 2112 WEST LANE. WEST ROCKY BRANCH	0-3 in	0			TM	C	33 GRABS	03	03
WH2286	26-JUL-88	SO	SOIL. ROW 3. SOUTH. 2203 BRADEN	0-3 in	0			TM	C	27 GRABS	01	03
WH2287	26-JUL-88	SO	SOIL. ROW 3. NORTH. 2203 BRADEN	0-3 in	0			TM	C	27 GRABS	01	03
WH2288	26-JUL-88	SO	SOIL. ROW 3. NORTH. 2203 BRADEN. EPA SPLIT.	0-3 in	0	SPLT	WH2287		C	27 GRABS	04	03
WH2289	26-JUL-88	SO	SOIL. ROW 3. WEST. 2203 BRADEN	0-3 in	0			TM	C	27 GRABS	01	03
WH2290	26 JUL-88	SO	SOIL. ROW 4. WEST 2203 BRADEN	0-3 in	0			TM	C	24 GRABS	01	03
WH2291	26-JUL-88	SO	SOIL ROW 4. SOUTH. 2203 BRADEN	0-3 in	0			TM	C	24 GRABS	01	03
WH2292	26-JUL-88	SO	SOIL. ROW 4. NORTH. 2203 BRADEN	0-3 in	0			TM	C	24 GRABS	01	03
WH2293	26-JUL-88	SO	SOIL. ROW 3. SOUTH 2202 BRADEN	0-3 in	0			TM	C	36 GRABS	01	03
WH2294	26-JUL-88	SO	SOIL. ROW 3. WEST. 2202 BRADEN	0-3 in.	0			TM	C	36 GRABS	01	03
WH2295	26 JUL-88	SO	SOIL. ROW 3. NORTH. 2202 BRADEN	0-3 in	0			TM	C	36 GRABS	01	03
WH2296	26 JUL 88	SO	SOIL ROW 4 SOUTH 2202 BRADEN	0-3 in	0			TM	C	32 GRABS	03	03
WH2297	26-JUL-88	SO	SOIL. ROW 4. WEST 2202 BRADEN	0-3 in	0			TM	C	32 GRABS	03	03

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Analysis Request

03 - TCDD; 2,3,7,8-TCDD
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TABLE A-1
NUMERIC LISTING OF ALL SAMPLES COLLECTED

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2298	26-JUL-88	SO	SOIL, ROW 4, NORTH, 2202 BRADEN.	0-3 in	0			TM	C	32 GRABS	03	03
WH2299	26-JUL-88	SO	SOIL, ROW 3, NORTH, 618 ALTA COVE	0-3 in.	0			TM	C	35 GRABS	03	03
WH2300	26-JUL-88	SO	SOIL, ROW 3, SOUTH, 618 ALTA COVE.	0-3 in	0			TM	C	35 GRABS	03	03
WH2301	26-JUL-88	SO	SOIL, ROW 3, WEST, 618 ALTA COVE	0-3 in	0			TM	C	35 GRABS	03	03
WH2302	26-JUL-88	SO	SOIL, ROW 4, WEST, 618 ALTA COVE.	0-3 in	0			TM	C	35 GRABS	03	03
WH2303	26-JUL-88	SO	SOIL, ROW 4, NORTH, 618 ALTA COVE	0-3 in.	0			TM	C	35 GRABS	03	03
WH2304	26 JUL 88	SO	SOIL, ROW 4, SOUTH 618 ALTA COVE.	0-3 in	0			TM	C	35 GRABS	03	03
WH2305	26-JUL-88	SO	SOIL, ROW 3, NORTH, 1704 HILL ROAD	0-3 in	0			TM	C	28 GRABS	01	03
WH2306	26-JUL-88	SO	SOIL, ROW 3, SOUTH 1704 HILL ROAD	0-3 in	0			TM	C	28 GRABS	01	03
WH2307	26-JUL-88	SO	SOIL, ROW 3, EAST 1704 HILL ROAD	0-3 in	0			TM	C	28 GRABS	01	03
WH2308	26-JUL-88	SO	SOIL, ROW 4 EAST, 1704 HILL ROAD.	0-3 in.	0			TM	C	28 GRABS	01	03
WH2309	26 JUL 88	SO	SOIL, ROW 4, NORTH, 1704 HILL ROAD.	0-3 in.	0			TM	C	28 GRABS	01	03
WH2310	26-JUL-88	SO	SOIL, ROW 4, SOUTH 1704 HILL ROAD	0-3 in	0			TM	C	28 GRABS	01	03
WH2311	26-JUL-88	SO	SOIL, WEST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 in	0			TM	C	25 GRABS	01	03
WH2312	26-JUL-88	SO	SOIL, EAST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 in	0			TM	C	25 GRABS	01	03
WH2313	26-JUL 88	SO	SOIL,NORTH MARKERS SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 in	0			TM	C	28 GRABS	01	03
WH2314	26-JUL-88	SO	SOIL, SOUTH MARKER, NORTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 in	0	ORIG	WH2316	TM	C	40 GRABS	01	03
WH2315	26-JUL-88	SO	SOIL, SOUTH MARKER, NORTH OF DITCH, MANHOLE #2745,1704 HILL,EPA SPLIT	0-3 in	0	SPLT	WH2314		C	40 GRABS	04	03
WH2316	26-JUL-88	SO	SOIL SOUTH MARKER, NORTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 in	0	QDU	WH2314	TM	C	40 GRABS	01	03
WH2317	26-JUL-88	SO	SOIL, EAST MARKERS, NORTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	0-3 in	0			TM	C	40 GRABS	01	03
WH2318	26-JUL-88	SO	SOIL, WEST MARKERS NORTH OF DITCH, MANHOLE #2745 1704 HILL ROAD	0-3 in	0			TM	C	40 GRABS	01	03
WH2319	26-JUL-88	LI	LIQUID HEXANE EQUIPMENT RINSE.		0	QRI		TM	C	NA	01	03
WH2320	26-JUL-88	LI	LIQUID HEXANE TRIP BLANK		0	QBL		TM	C	NA	01	03
WH2321	10 AUG-88	SO	SOIL, ROW 1, WEST 1704 HILL ROAD, REVISED EAST ROCKY BRANCH	0-3 in	0	ORIG	WH2324	TM	C	21 GRABS	01	03
WH2322	10-AUG-88	SO	SOIL, ROW 1, SOUTH 1704 HILL ROAD, REVISED EAST ROCKY BRANCH	0-3 in	0			TM	C	21 GRABS	01	03

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SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2323	10-AUG-88	SO	SOIL. ROW 1. WEST 1704 HILL ROAD. REVISED EPA SPLIT	0-3 in	0	SPLT	WH2321		C	21 GRABS	04	03
WH2324	10-AUG-88	SO	SOIL ROW 1. WEST 1704 HILL ROAD REVISED EAST ROCKY BRANCH	0-3 in	0	ODU	WH2321	TM	C	21 GRABS	01	03
WH2325	10-AUG-88	SO	SOIL. ROW 1 NORTH. 1704 HILL ROAD, REVISED, EAST ROCKY BRANCH	0-3 in.	0			TM	C	21 GRABS	01	03
WH2326	10-AUG-88	SO	SOIL. ROW 2. WEST. 1704 HILL ROAD. REVISED. EAST ROCKY BRANCH	0-3 in	0			TM	C	21 GRABS	01	03
WH2327	10-AUG-88	SO	SOIL. ROW 2. NORTH 1704 HILL ROAD. REVISED, EAST ROCKY BRANCH	0-3 in.	0			TM	C	21 GRABS	01	03
WH2328	10-AUG-88	SO	SOIL. ROW 2. SOUTH. 1704 HILL ROAD, REVISED EAST ROCKY BRANCH	0-3 in	0			TM	C	21 GRABS	01	03
WH2329	10-AUG-88	SO	SOIL SOUTH. 1704 HILL RD., MANHOLE #2745 DITCH REVISED,E ROCKY BRANCH.	0-3 in.	0	ORIG	WH2332	TM	C	32 GRABS	01	03
WH2330	10-AUG-88	SO	SOIL. EAST 1704 HILL ST . MANHOLE #2745 DITCH REVISED E ROCKY BRANCH	0-3 in	0			TM	C	32 GRABS	01	03
WH2331	10 AUG 88	SO	SOIL. SOUTH. 1704 HILL RD . MANHOLE #2745 DITCH EPA SPLIT REVISED	0-3 in.	0	SPLT	WH2329		C	36 GRABS	04	03
WH2332	10 AUG-88	SO	SOIL. SOUTH. 1704 HILL RD . MANHOLE #2745 DITCH,REVISED,E ROCKY BRANCH	0-3 in.	0	ODU	WH2329	TM	C	36 GRABS	01	03
WH2333	10-AUG-88	SO	SOIL. NORTH. 1704 HILL RD . MANHOLE #2745 DITCH,REVISED,E ROCKY BRANCH	0-3 in	0			TM	C	32 GRABS	01	03
WH2334	10-AUG-88	SO	SOIL. NORTH. 1704 HILL RD .NORTH OF DITCH EAST ROCKY BRANCH	0-3 in	0			TM	C	24 GRABS	01	03
WH2335	10-AUG-88	SO	SOIL. NORTH. 1704 HILL RD NORTH OF DITCH EPA SPLIT	0-3 in	0	SPLT	WH2334		C	24 GRABS	04	03
WH2336	10-AUG-88	SO	SOIL. SOUTH. 1704 HILL RD NORTH OF DITCH EAST ROCKY BRANCH	0-3 in	0			TM	C	24 GRABS	01	03
WH2337	10-AUG-88	SO	SOIL. WEST. 1704 HILL RD . NORTH OF DITCH EAST ROCKY BRANCH	0-3 in	0			TM	C	24 GRABS	01	03
WH2338	10-AUG-88	LI	LIQUID. HEXANE. EQUIPMENT RINSE.		0	QRI		TM	C	NA	01	03
WH2339	10-AUG-88	LI	LIQUID HEXANE TRIP BLANK		0	QBL		TM	C	NA	01	03
WH2340	11-AUG-88	SE	SEDIMENT BAYOU METO AT STP OUTFALL	0-1 in	0	ORIG	WH2341	TM	C3	10 GRABS	01	03
WH2341	11-AUG-88	SE	SEDIMENT BAYOU METO AT STP OUTFALL	0-1 in	0	ODU	WH2340	TM	C3	10 GRABS	01	03
WH2342	11-AUG-88	SE	SEDIMENT. BAYOU METO AT STP OUTFALL EPA SPLIT	0-1 in	0	SPLT	WH2341	TM	C3	10 GRABS	04	03
WH2343	11-AUG-88	SO	SOIL. BAYOU METO STP OUTFALL 60 IN RIGHT BANK	0-3 in	0			TM	C3	26 GRABS	01	03
WH2344	11-AUG-88	SO	SOIL. BAYOU METO AT STP OUTFALL. 36 IN RIGHT BANK	0-3 in	0			TM	C3	26 GRABS	01	03
WH2345	11-AUG-88	SO	SOIL BAYOU METO AT STP OUTFALL. 6 IN . RIGHT BANK	0-3 in	0	ORIG	WH2347	TM	C3	26 GRABS	01	03
WH2346	11-AUG-88	SO	SOIL BAYOU METO AT STP OUTFALL. 6 IN RIGHT BANK EPA SPLIT	0-3 in	0	SPLT	WH2345		C3	26 GRABS	04	03
WH2347	11-AUG-88	SO	SOIL. BAYOU METO AT STP OUTFALL. 6 IN . RIGHT BANK	0-3 in	0	ODU	WH2345	TM	C3	26 GRABS	01	03

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TABLE A-1
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SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE LB	AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2348	11-AUG-88	SO	SOIL. BAYOU METO AT STP OUTFALL. 60 IN LEFT BANK	0-3 in	0			TM	G3	26 GRABS	01	03
WH2349	11 AUG-88	SO	SOIL BAYOU METO AT STP OUTFALL. 36 IN . LEFT BANK	0-3 in	0	ORIG	WH2351	TM	G3	26 GRABS	01	03
WH2350	11-AUG-88	SO	SOIL. BAYOU METO AT STP OUTFALL. 36 IN . LEFT BANK. EPA SPLIT	0-3 in	0	SPLT	WH2349		G3	26 GRABS	04	03
WH2351	11-AUG-88	SO	SOIL. BAYOU METO AT STP OUTFALL. 36 IN . LEFT BANK	0-3 in.	0	QDU	WH2349	TM	G3	26 GRABS	01	03
WH2352	11-AUG-88	SO	SOIL. BAYOU METO AT STP OUTFALL. 6 IN LEFT BANK	0-3 in	0			TM	G3	26 GRABS	01	03
WH2353	11-AUG-88	SO	SOIL SOUTHWEST. 1704 HILL ROAD. NORTH OF POOL	0-3 in	0			TM	C	36 GRABS	01	03
WH2354	11-AUG-88	SO	SOIL. NORTHEAST. 1704 HILL ROAD. NORTH OF POOL	0-3 in	0			TM	C	36 GRABS	01	03
WH2355	11 AUG-88	SO	SOIL. NORTHWEST. 1704 HILL ROAD. NORTH OF POOL	0-3 in	0	ORIG	WH2357	TM	C	36 GRABS	01	03
WH2356	11-AUG-88	SO	SOIL. NORTHWEST. 1704 HILL ROAD. NORTH OF POOL EPA SPLIT	0-3 in	0	SPLT	WH2355		C	36 GRABS	04	03
WH2357	11-AUG-88	SO	SOIL NORTHWEST. 1704 HILL ROAD. NORTH OF POOL	0-3 in	0	QDU	WH2355	TM	C	36 GRABS	01	03
WH2358	11 AUG 88	SO	SOIL. EAST. 1712 HILL ROAD. MANHOLE NUMBER 2741	0-3 in	0			TM	C	35 GRABS	01	03
WH2359	11-AUG-88	SO	SOIL. WEST. 1712 HILL ROAD. MANHOLE NUMBER 2741	0-3 in.	0			TM	C	35 GRABS	01	03
WH2360	11-AUG-88	SO	SOIL.SOUTH. 1712 HILL ROAD. MANHOLE NUMBER 2741	0-3 in	0			TM	C	35 GRABS	01	03
WH2361	11-AUG-88	SO	SOIL. SOUTH. 1712 HILL ROAD.MANHOLE NUMBER 2741. EPA SPLIT	0-3 in	0	SPLT	WH2360		C	35 GRABS	04	03
WH2362	11-AUG-88	SO	SOIL. SOUTH. 1804 HILL ROAD.MANHOLE NUMBER 2740	0-3 in	0			TM	C	35 GRABS	01	03
WH2363	11-AUG-88	SO	SOIL. WEST. 1804 HILL ROAD. MANHOLE NUMBER 2740	0-3 in	0			TM	C	35 GRABS	01	03
WH2364	11-AUG-88	SO	SOIL. WEST. 1804 HILL ROAD. MANHOLE NUMBER 2740. EPA SPLIT	0-3 in	0	SPLT	WH2363		C	35 GRABS	04	03
WH2365	11 AUG-88	SO	SOIL. EAST. 1804 HILL ROAD. MANHOLE NUMBER 2740	0-3 in	0			TM	C	35 GRABS	01	03
WH2366	11-AUG 88	SO	SOIL DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD	0-3 in	0			TM	C	7 GRABS	01	03
WH2367	11-AUG-88	LI	LIQUID. HEXANE. EQUIPMENT RINSE		0	ORI		TM	C	NA	01	03
WH2368	11-AUG-88	SO	SOIL. DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD. EPA SPLIT	0-3 in	0	SPLT	WH2366		C	7 GRABS	04	03
WH2369	11-AUG-88	SO	SOIL. DITCH BEHIND 1704 HILL ROAD. EPA SPLIT	0-3 in	0	SPLT	WH2371		C	10 GRABS	04	03
WH2370	11-AUG 88	LI	LIQUID. HEXANE TRIP BLANK		0	QBL		TM	C	NA	01	03
WH2371	11-AUG-88	SO	SOIL DITCH BEHIND 1704 HILL ROAD WEST OF MANHOLE NUMBER 2745	0-3 in	0			TM	C	10 GRABS	01	03
WH2372	12-AUG 88	SO	SOIL. MARSHALL ROAD MANHOLE NUMBER 1152 NORTHEAST	0-3 in	0			TM	C	30 GRABS	01	03

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SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	LB	REFERENCE AREAS	UNITS IN COMPOSITE	SAMPLE STATUS	ANALYSIS REQUEST
WH2373	12-AUG-88	SO	SOIL. MARSHALL ROAD MANHOLE NUMBER 1152. SOUTHWEST	0-3 in.	0			TM	C	30 GRABS	01	03
WH2374	12-AUG-88	SO	SOIL. MARSHALL ROAD MANHOLE NUMBER 1152. NORTHWEST.	0-3 in.	0			TM	C	30 GRABS	01	03
WH2375	12-AUG-88	SO	SOIL. ROW 5. NORTH. 250-500 FT.WEST ROCKY BRANCH.	0-3 in.	0			TM	C	25 GRABS	01	03
WH2376	12-AUG-88	SO	SOIL. ROW 5. WEST. 250-500 FT. WEST ROCKY BRANCH.	0-3 in.	0			TM	C	25 GRABS	01	03
WH2377	12-AUG-88	SO	SOIL. ROW 5. SOUTH. 250-500 FT.WEST ROCKY BRANCH.	0-3 in.	0			TM	C	25 GRABS	01	03
WH2378	12-AUG-88	SO	SOIL. ROW 6. NORTH. 250-500 FT.WEST ROCKY BRANCH	0-3 in.	0			TM	C	21 GRABS	01	03
WH2379	12-AUG-88	SO	SOIL. ROW 6. WEST. 250-500 FT. WEST ROCKY BRANCH.	0-3 in.	0			TM	C	21 GRABS	01	03
WH2380	12-AUG-88	SO	SOIL. ROW 6. SOUTH. 250-500 FT.WEST ROCKY BRANCH.	0-3 in.	0			TM	C	21 GRABS	01	03
WH2381	12-AUG-88	LI	LIQUID. HEXANE. EQUIPMENT RINSE		0	QRI		TM	C	NA	01	03
WH2382	12-AUG-88	LI	LIQUID. HEXANE. TRIP BLANK.		0	QBL		TM	C	NA	01	03
WH2383	07-SEP-88	SO	SOIL. GARDEN AT 2113 BRADEN.	0-3 in.	0			TM	D	6 grabs	01	03

536 records selected

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TABLE A-2

TABLE A-2
NUMERIC LISTING AND ANALYTICAL RESULTS OF ALL SAMPLES
SUBMITTED FOR DIOXIN ANALYSIS

SAMPLE NUMBER	SAMP TYPE	TCDD Q	2378 TCDD Q	DEPTH OF TAKE	DIOXIN UNITS	DATE SAMPLED	FEET ABOVE WATER	SAMPLE LOCATION DESCRIPTION	REFERENCE AREAS	QC CODE	QA/QC PARTNER	UNITS IN COMPOSITE	SAMPLE STATUS
WH2205	LI	3 U			ng/sample	19-JUL-88	0	LIQUID, HEXANE, TRIP BLANK.	C	QBL		Ma	01
WH2206	SE	1 89	.29	0-4 in.	ppb	21-JUL-88	-3 5	SLUDGE, WEST END OF NORTH OXIDATION POND, TOP SEDIMENT/SLUDGE	G1			4 GRABS	01
WH2207	CO	3 U		0-3 in	ppb	21-JUL-88	5	SLUDGE, WEST END OF NORTH OXIDATION POND, INTERFACE	G1			4 CORINGS	01
WH2208	SE	1 702	97	0-4 in	ppb	21-JUL 88	-3 5	SLUDGE, EAST END OF NORTH OXIDATION POND, TOP SEDIMENT/SLUDGE	G1			4 GRABS	01
WH2209	CO	3 U		0-3 in	ppb	21-JUL-88	-5	SLUDGE,EAST HALF OF NORTH OXIDATION POND INTERFACE	G1	ORIG	WH2210	4 CORINGS	01
WH2210	CO	.3 U		0-3 in	ppb	21-JUL-88	-5	SLUDGE,EAST HALF OF NORTH OXIDATION POND, INTERFACE	G1	QDU	WH2209	4 CORINGS	01
WH2212	CO	3 U		0-3 in	ppb	21-JUL-88	-5	SLUDGE, WEST END OF SOUTH OXIDATION POND, INTERFACE	G2			4 CORINGS	01
WH2213	SE	3 U		0-4 in.	ppb	21-JUL-88	-3 5	SLUDGE, WEST END OF SOUTH OXIDATION POND, TOP SEDIMENT/SLUDGE.	G2			4 GRABS	01
WH2214	CO	.3 U		0-3 in	ppb	21-JUL-88	-5	SLUDGE, EAST END OF SOUTH OXIDATION POND, INTERFACE	G2			4 CORINGS	01
WH2215	SE	.3 U		0-4 in.	ppb	21-JUL-88	-3.5	SLUDGE, EAST END OF SOUTH OXIDATION POND, TOP SEDIMENT/SLUDGE.	G2			4 GRABS	01
WH2220	SE	.3 U		0-2 in.	ppb	22-JUL-88	-12	SLUDGE, NORTH QUADRANT OF AERATION BASIN, TOP SEDIMENT/SLUDGE	F			6 GRABS	01
WH2221	SE	2 705	1 41	0-2 in	ppb	22-JUL-88	-12	SLUDGE,NORTH-EAST QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	F			6 GRABS	01
WH2222	SE	2.84	2.83	0-2 in	ppb	22-JUL-88	-12	SLUDGE, SOUTH QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	F	ORIG	WH2226	6 GRABS	01
WH2224	SE	71		0-2 in	ppb	22-JUL-88	-12	SLUDGE,SOUTH-WEST QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE.	F			6 GRABS	01
WH2226	SE	2 336	1 07	0-2 in	ppb	22-JUL-88	-12	SLUDGE, SOUTH QUADRANT AERATION BASIN, TOP SEDIMENT/SLUDGE	F	QDU	WH2222	6 GRABS	01
WH2227	CO	.3 U		0-1 in	ppb	22-JUL-88	-15	SLUDGE, NORTH QUADRANT AERATION POND, INTERFACE.	F			6 CORINGS	01
WH2228	CO	.3 U		0-1 in	ppb	22-JUL-88	-15	SLUDGE,NORTH-EAST QUADRANT,AERATION BASIN, INTERFACE	F			6 CORINGS	01
WH2229	CO	.3 U		0-1 in	ppb	22-JUL-88	15	SLUDGE SOUTH QUADRANT AERATION BASIN, INTERFACE	F	ORIG	WH2230	6 CORINGS	01
WH2230	CO	3 U		0-1 in	ppb	22-JUL-88	-15	SLUDGE, SOUTH QUADRANT AERATION BASIN, INTERFACE	F	QDU	WH2229	6 CORINGS	01
WH2232	CO	3 U		0-1 in	ppb	22-JUL-88	-15	SLUDGE,SOUTH-WEST QUADRANT AERATION BASIN, INTERFACE	F			6 CORINGS	01
WH2233	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL EAST, 1000-1250 FT. E. ROCKY BR RESAMPLE ROW 1.EXCEPT DIRT PILE	C			43 GRABS	01
WH2234	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL EAST, 1000-ROAD, E ROCKY BR RESAMPLE, ROW 1. EXCEPT DIRT PILE	C			35 GRABS	01
WH2235	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL, EAST, ROAD 1250 FEET, EAST ROCKY BRANCH RESAMPLE, ROW 1	C			8 GRABS	01
WH2236	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL, WEST, MANHOLE NUMBER 2735 AT 617 OAKLEY	C			35 GRABS	01
WH2237	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL, NORTH, MANHOLE NUMBER 2735 AT 617 OAKLEY	C			35 GRABS	01

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WH2238	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL, SOUTH, MANHOLE NUMBER 2735 AT 617 OAKLEY	C			35 GRABS	01
WH2240	LI	58			ng/sample	23-JUL-88	0	LIQUID, HEXANE, EQUIPMENT RINSE	C		QR1	2 RINSES	01
WH2240V	LI	61			ng/sample	23-JUL-88	0	LIQUID, HEXANE, EQUIPMENT RINSE, VERIFICATION ANALYSIS OF WH2240	C		QR1	2 RINSES	01
WH2241	SO	3 U		0-3 in	ppb	23-JUL-88	5	SOIL, 2510-2940 FT. E ROCKY BRANCH, RESAMPLE, 6 IN LEVEL, RIGHT BANK.	A			38 GRABS	01
WH2242	SO	3 U		0-3 in.	ppb	23-JUL-88	0	SOIL, VACANT LOT AT PARKING AREA NXT TO GATE BETWEEN 3010 & 3018 HIMES	D			NA	01
WH2243	SO	3 U		0-3 in	ppb	23-JUL-88	0	SOIL, FIELD BEHIND CHURCH ON BRADEN STREET.	D			NA	01
WH2244	SO	3 U		0-3 in	ppb	25-JUL-88	0	SOIL, 604 BROOKHAVEN COURT, MIDDLE OF FENCE, BETWEEN FENCE & POOL	D			NA	01
WH2245	SO	3 U		0-3 in	ppb	25-JUL-88	0	SOIL, 604 CHERYL, MIDDLE OF FENCE ACROSS BACKYARD	D			NA	01
WH2246	SO	.3 U		0-3 in	ppb	25-JUL-88	0	SOIL 2200 BRADEN, 4' NORTH SIDE OF TELEPHONE POLE ON CORNER	D			NA	01
WH2247	SO	3 U		0-3 in	ppb	25-JUL-88	0	SOIL 2111 BRADEN, BETWEEN PLANTS & HOUSE, 4 FT ON WEST SIDE	D			NA	01
WH2249	SO	723		0-3 in	ppb	24-JUL-88	0	SOIL, ROW 3, NORTH, 0-250 FT. WEST ROCKY BRANCH	C			50 GRABS	01
WH2250	SO	.794		0-3 in	ppb	24-JUL-88	0	SOIL, ROW 3, WEST, 0-250 FT. WEST ROCKY BRANCH	C			50 GRABS	01
WH2252	SO	869		0-3 in	ppb	24-JUL-88	0	SOIL, ROW 3, SOUTH, 0-250 FT. WEST ROCKY BRANCH	C			50 GRABS	01
WH2256	LI	3 U			ng/sample	24-JUL-88	0	LIQUID HEXANE EQUIPMENT RINSE	C		QR1	2 RINSES	01
WH2257	SO	1 74	1 00	0-3 in	ppb	24-JUL-88	0	SOIL, ROW 3, NORTH, 250-500 FT.WEST ROCKY BRANCH	C			50 GRABS	01
WH2258	SO	1 476	1 74	0-3 in.	ppb	24-JUL-88	0	SOIL, ROW 3, SOUTH, 250-500 FT.WEST ROCKY BRANCH	C			50 GRABS	01
WH2259	SO	961	96	0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, WEST, 250-500 FT. WEST ROCKY BRANCH	C			50 GRABS	01
WH2260	SO	867	1 15	0-3 in	ppb	25-JUL-88	0	SOIL ROW 4, NORTH, 250-500 FT WEST ROCKY BRANCH	C			50 GRABS	01
WH2261	SO	1 476	1 32	0-3 in.	ppb	25-JUL-88	0	SOIL ROW 4, SOUTH, 250-500 FT.WEST ROCKY BRANCH	C			50 GRABS	01
WH2262	SO	1 255	1 45	0-3 in	ppb	25-JUL-88	0	SOIL ROW 4 WEST, 250-500 FT. WEST ROCKY BRANCH	C			50 GRABS	01
WH2263	SO	417		0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, WEST, 500-750 FT. WEST ROCKY BRANCH	C			48 GRABS	01
WH2264	SO	3 U		0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, NORTH 500-750 FT.WEST ROCKY BRANCH	C			48 GRABS	01
WH2266	SO	3 U			ppb	24-JUL-88	0	SOIL, BLANK	C		QBL	NA	01
WH2267	SO	3 U		0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, SOUTH, 500-750 FT.WEST ROCKY BRANCH	C			48 GRABS	01
WH2271	SO	729		0 3 in	ppb	25-JUL-88	0	SOIL, ROW 3, WEST 750-930 FT. WEST ROCKY BRANCH	C			30 GRABS	01

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WH2272	SO	695		0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, NORTH, 750-930 FT, WEST ROCKY BRANCH	C			30 GRABS	01
WH2273	SO	.584		0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, SOUTH, 750-930 FT, WEST ROCKY BRANCH	C			30 GRABS	01
WH2277	SO	539		0-3 in	ppb	25-JUL-88	0	SOIL, ROW 3, NORTH, 2112 WEST LANE	C			32 GRABS	01
WH2278	SO	.716		0-3 in.	ppb	25-JUL-88	0	SOIL, ROW 3, SOUTH, 2112 WEST LANE.	C			32 GRABS	01
WH2280	LI	.3 U			ng/sample	25-JUL-88	0	LIQUID, HEXANE, EQUIPMENT RINSE.	C	QR1		2 RINSES	01
WH2281	LI	3 U			ng/sample	25-JUL-88	0	LIQUID, HEXANE, TRIP BLANK	C	QBL		NA	01
WH2282	SO	575		0-3 in.	ppb	25-JUL-88	0	SOIL, ROW 3, WEST, 2112 WEST LANE.	C			32 GRABS	01
WH2286	SO	1.621	.33	0-3 in.	ppb	26-JUL-88	0	SOIL, ROW 3, SOUTH, 2203 BRADEN	C			27 GRABS	01
WH2287	SO	3 U		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3 NORTH, 2203 BRADEN.	C			27 GRABS	01
WH2288	SO	U		0-3 in.		26-JUL-88	0	SOIL, ROW 3, NORTH, 2203 BRADEN, EPA SPLIT	C	SPLT	WH2287	27 GRABS	04
WH2289	SO	3 U		0-3 in.	ppb	26-JUL-88	0	SOIL, ROW 3, WEST, 2203 BRADEN.	C			27 GRABS	01
WH2290	SO	3 U		0-3 in.	ppb	26-JUL-88	0	SOIL, ROW 4, WEST, 2203 BRADEN	C			24 GRABS	01
WH2291	SO	3 U		0-3 in.	ppb	26-JUL-88	0	SOIL, ROW 4, SOUTH 2203 BRADEN.	C			24 GRABS	01
WH2292	SO	.3 U		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 4 NORTH, 2203 BRADEN.	C			24 GRABS	01
WH2293	SO	387		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3, SOUTH, 2202 BRADEN.	C			36 GRABS	01
WH2294	SO	3 U		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3, WEST, 2202 BRADEN	C			36 GRABS	01
WH2295	SO	3 U		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3, NORTH, 2202 BRADEN	C			36 GRABS	01
WH2305	SO	1 077	1 82	0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3, NORTH, 1704 HILL ROAD.	C			28 GRABS	01
WH2306	SO	949	2 44	0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3, SOUTH 1704 HILL ROAD	C			28 GRABS	01
WH2307	SO	2 503	1 69	0-3 in	ppb	26-JUL-88	0	SOIL, ROW 3, EAST, 1704 HILL ROAD	C			28 GRABS	01
WH2308	SO	603		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 4, EAST, 1704 HILL ROAD	C			28 GRABS	01
WH2309	SO	3 U		0-3 in.	ppb	26-JUL-88	0	SOIL, ROW 4, NORTH, 1704 HILL ROAD	C			28 GRABS	01
WH2310	SO	894		0-3 in	ppb	26-JUL-88	0	SOIL, ROW 4, SOUTH, 1704 HILL ROAD	C			28 GRABS	01
WH2311	SO	3 U		0-3 in	ppb	26-JUL-88	0	SOIL, WEST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	C			25 GRABS	01
WH2312	SO	.3 U		0-3 in	ppb	26-JUL-88	0	SOIL, EAST MARKERS, SOUTH OF DITCH, MANHOLE #2745, 1704 HILL ROAD	C			25 GRABS	01

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WH2313	SO	.519		0-3 in	ppb	26-JUL-88	0	SOIL.NORTH MARKERS. SOUTH OF DITCH, MANHOLE #2745. 1704 HILL ROAD	C			28 GRABS	01
WH2314	SO	2 849	3 09	0-3 in	ppb	26-JUL-88	0	SOIL. SOUTH MARKER. NORTH OF DITCH, MANHOLE #2745. 1704 HILL ROAD	C	ORIG	WH2316	40 GRABS	01
WH2316	SO	2.814	2 69	0-3 in	ppb	26-JUL-88	0	SOIL. SOUTH MARKER. NORTH OF DITCH, MANHOLE #2745. 1704 HILL ROAD	C	QDU	WH2314	40 GRABS	01
WH2317	SO	2 875	3 25	0-3 in	ppb	26-JUL-88	0	SOIL. EAST MARKERS, NORTH OF DITCH, MANHOLE #2745. 1704 HILL ROAD	C			40 GRABS	01
WH2318	SO	3 183	3 85	0-3 in	ppb	26-JUL-88	0	SOIL. WEST MARKERS, NORTH OF DITCH, MANHOLE #2745. 1704 HILL ROAD.	C			40 GRABS	01
WH2319	LI	.3 U			ng/sample	26-JUL-88	0	LIQUID, HEXANE, EQUIPMENT RINSE	C	QRI		NA	01
WH2320	LI	.3 U			ng/sample	26-JUL-88	0	LIQUID, HEXANE, TRIP BLANK.	C	QBL		NA	01
WH2321	SO	1 775	1 88	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 1 WEST, 1704 HILL ROAD. REVISED, EAST ROCKY BRANCH	C	ORIG	WH2324	21 GRABS	01
WH2322	SO	3 682	3 65	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 1, SOUTH, 1704 HILL ROAD, REVISED, EAST ROCKY BRANCH	C			21 GRABS	01
WH2324	SO	2 388	2 3	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 1, WEST, 1704 HILL ROAD, REVISED, EAST ROCKY BRANCH	C	QDU	WH2321	21 GRABS	01
WH2325	SO	2 654	2.66	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 1, NORTH, 1704 HILL ROAD, REVISED, EAST ROCKY BRANCH	C			21 GRABS	01
WH2326	SO	10 427	10 92	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 2, WEST, 1704 HILL ROAD, REVISED, EAST ROCKY BRANCH	C			21 GRABS	01
WH2327	SO	5.985	5 76	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 2, NORTH, 1704 HILL ROAD, REVISED, EAST ROCKY BRANCH	C			21 GRABS	01
WH2328	SO	11 397	12 32	0-3 in	ppb	10-AUG-88	0	SOIL, ROW 2, SOUTH, 1704 HILL ROAD REVISED, EAST ROCKY BRANCH	C			21 GRABS	01
WH2329	SO	3 465	3.34	0-3 in	ppb	10-AUG-88	0	SOIL, SOUTH, 1704 HILL RD , MANHOLE #2745.DITCH REVISED.E ROCKY BRANCH.	C	ORIG	WH2332	32 GRABS	01
WH2330	SO	3 232	3.19	0-3 in	ppb	10-AUG-88	0	SOIL, EAST, 1704 HILL ST., MANHOLE #2745 DITCH REVISED.E ROCKY BRANCH.	C			32 GRABS	01
WH2332	SO	2 863	2 78	0-3 in	ppb	10-AUG-88	0	SOIL, SOUTH, 1704 HILL RD., MANHOLE #2745 DITCH.REVISED.E ROCKY BRANCH	C	QDU	WH2329	36 GRABS	01
WH2333	SO	4 997	4 8	0-3 in	ppb	10-AUG-88	0	SOIL, NORTH, 1704 HILL RD , MANHOLE #2745 DITCH REVISED.E ROCKY BRANCH.	C			32 GRABS	01
WH2334	SO	335		0-3 in	ppb	10-AUG-88	0	SOIL, NORTH, 1704 HILL RD..NORTH OF DITCH, EAST ROCKY BRANCH	C			24 GRABS	01
WH2336	SO	334		0-3 in	ppb	10-AUG-88	0	SOIL SOUTH, 1704 HILL RD .NORTH OF DITCH EAST ROCKY BRANCH	C			24 GRABS	01
WH2337	SO	372		0-3 in	ppb	10-AUG-88	0	SOIL, WEST 1704 HILL RD . NORTH OF DITCH EAST ROCKY BRANCH	C			24 GRABS	01
WH2338	LI	3 U			ng/sample	10-AUG-88	0	LIQUID, HEXANE, EQUIPMENT RINSE	C	QRI		NA	01
WH2339	LI	3 U			ng/sample	10-AUG-88	0	LIQUID, HEXANE TRIP BLANK	C	QBL		NA	01
WH2340	SE	3 U		0-1 in	ppb	11-AUG-88	0	SEDIMENT BAYOU HETO AT STP OUTFALL	G3	ORIG	WH2341	10 GRABS	01
WH2341	SE	3 U		0 1 in	ppb	11-AUG-88	0	SEDIMENT.BAYOU HETO AT STP OUTFALL	G3	QDU	WH2340	10 GRABS	01

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WH2343	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO STP OUTFALL.60 IN. RIGHT BANK	G3			26 GRABS	01
WH2344	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO AT STP OUTFALL, 36 IN . RIGHT BANK	G3			26 GRABS	01
WH2345	SO	.3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO AT STP OUTFALL, 6 IN . RIGHT BANK	G3	ORIG	WH2347	26 GRABS	01
WH2347	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO AT STP OUTFALL, 6 IN . RIGHT BANK	G3	QDU	WH2345	26 GRABS	01
WH2348	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO AT STP OUTFALL, 60 IN . LEFT BANK	G3			26 GRABS	01
WH2349	SO	.3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO AT STP OUTFALL, 36 IN., LEFT BANK	G3	ORIG	WH2351	26 GRABS	01
WH2351	SO	.3 U		0-3 in.	ppb	11-AUG-88	0	SOIL, BAYOU NETO AT STP OUTFALL, 36 IN . LEFT BANK	G3	QDU	WH2349	26 GRABS	01
WH2352	SO	.3 U		0-3 in	ppb	11-AUG-88	0	SOIL BAYOU NETO AT STP OUTFALL, 6 IN . LEFT BANK.	G3			26 GRABS	01
WH2353	SO	6.939	7 16	0-3 in	ppb	11-AUG-88	0	SOIL, SOUTHWEST, 1704 HILL ROAD, NORTH OF POOL	C			36 GRABS	01
WH2354	SO	6.651	6.52	0-3 in.	ppb	11-AUG-88	0	SOIL, NORTHEAST, 1704 HILL ROAD, NORTH OF POOL	C			36 GRABS	01
WH2355	SO	11 577	11 65	0-3 in	ppb	11-AUG-88	0	SOIL, NORTHWEST, 1704 HILL ROAD, NORTH OF POOL	C	ORIG	WH2357	36 GRABS	01
WH2357	SO	5 128	5 1	0-3 in	ppb	11-AUG-88	0	SOIL, NORTHWEST, 1704 HILL ROAD, NORTH OF POOL.	C	QDU	WH2355	36 GRABS	01
WH2358	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL, EAST, 1712 HILL ROAD, MANHOLE NUMBER 2741	C			35 GRABS	01
WH2359	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL, WEST, 1712 HILL ROAD, MANHOLE NUMBER 2741	C			35 GRABS	01
WH2360	SO	.3 U		0-3 in	ppb	11-AUG-88	0	SOIL,SOUTH, 1712 HILL ROAD, MANHOLE NUMBER 2741	C			35 GRABS	01
WH2362	SO	.3 U		0-3 in.	ppb	11-AUG-88	0	SOIL, SOUTH, 1804 HILL ROAD,MANHOLE NUMBER 2740	C			35 GRABS	01
WH2363	SO	.3 U		0-3 in	ppb	11-AUG-88	0	SOIL, WEST, 1804 HILL ROAD, MANHOLE NUMBER 2740	C			35 GRABS	01
WH2365	SO	3 U		0-3 in	ppb	11-AUG-88	0	SOIL, EAST, 1804 HILL ROAD, MANHOLE NUMBER 2740	C			35 GRABS	01
WH2366	SO	.3 U		0-3 in	ppb	11-AUG-88	0	SOIL, DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD	C			7 GRABS	01
WH2367	LI	3 U				11-AUG-88	0	LIQUID, HEXANE, EQUIPMENT RINSE	C	ORI		NA	01
WH2370	LI	.3 U				11-AUG-88	0	LIQUID, HEXANE, TRIP BLANK	C	QBL		NA	01
WH2371	SO	41 012	54 73	0-3 in	ppb	11-AUG-88	0	SOIL, DITCH BEHIND 1704 HILL ROAD. WEST OF MANHOLE NUMBER 2745	C			10 GRABS	01
WH2372	SO	3 U		0-3 in	ppb	12-AUG-88	0	SOIL, MARSHALL ROAD MANHOLE NUMBER 1152, NORTHEAST	C			30 GRABS	01
WH2373	SO	3 U		0-3 in	ppb	12-AUG-88	0	SOIL, MARSHALL ROAD MANHOLE NUMBER 1152, SOUTHWEST	C			30 GRABS	01
WH2374	SO	3 U		0-3 in	ppb	12-AUG-88	0	SOIL, MARSHALL ROAD MANHOLE NUMBER 1152, NORTHWEST	C			30 GRABS	01

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WH2375	SO	1.239	1.23	0-3 in.	ppb	12-AUG-88	0	SOIL, ROW 5, NORTH, 250-500 FT,WEST ROCKY BRANCH.	C			25 GRABS	01
WH2376	SO	1.275	1.28	0-3 in.	ppb	12-AUG-88	0	SOIL, ROW 5, WEST, 250-500 FT, WEST ROCKY BRANCH.	C			25 GRABS	01
WH2377	SO	1.334	1.34	0-3 in.	ppb	12-AUG-88	0	SOIL, ROW 5, SOUTH, 250-500 FT,WEST ROCKY BRANCH	C			25 GRABS	01
WH2378	SO	.849		0-3 in.	ppb	12-AUG-88	0	SOIL, ROW 6, NORTH, 250-500 FT,WEST ROCKY BRANCH.	C			21 GRABS	01
WH2379	SO	89		0-3 in	ppb	12-AUG-88	0	SOIL, ROW 6, WEST, 250-500 FT, WEST ROCKY BRANCH.	C			21 GRABS	01
WH2380	SO	.96		0-3 in.	ppb	12-AUG-88	0	SOIL, ROW 6, SOUTH, 250-500 FT,WEST ROCKY BRANCH.	C			21 GRABS	01
WH2381	LI	.3 U			ng/sample	12-AUG-88	0	LIQUID, HEXANE, EQUIPMENT RINSE.	C	QRI		NA	01
WH2382	LI	.3 U			ng/sample	12-AUG-88	0	LIQUID, HEXANE, TRIP BLANK.	C	QBL		NA	01
WH2383	SO	.3 U		0-3 in.	ppb	07-SEP-88	0	SOIL, GARDEN AT 2113 BRADEN.	D			6 grabs	01

359 records selected.

TABLE KEY

Q - Qualifier

U - Not Detected at stated concentration

T - To be reported in supplement to this report

QC - Quality Control

QRI - Rinse
QBL - Blank
QRIG - Original
QDU - Duplicate
SPLT - Split
QDM - Mix Check

Sample Status

01 - Rush
02 - Analyze (no rush)
03 - Hold

TABLE A-3

TABLE A-3
SOIL AND SEDIMENT SAMPLES COLLECTED AND SPLIT WITH EPA

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE AREAS	UNITS IN COMPOSITE
WH1379	30-JUN-88	SO	SOIL.1510-2000 FT 6 IN ABOVE WATER. ROCKY BRANCH. WEST LEG LEFT BANK	0-3 in	5	SPLT	WH1375	A	50 GRABS
WH1391	01-JUL-88	SE	SEDIMENT ROCKY BRANCH. WEST LEG AT VERTAC FENCE	grab	- 4	SPLT	WH1378	A	NA
WH1399	03-JUL-88	SO	SOIL. BAYOU METO 6 IN FROM WATER. RIGHT BANK	0-3 in.	5	SPLT	WH1398	J	50 GRABS
WH1413	04-JUL-88	SO	SOIL. DRY CREEK BED NEXT TO ROCKY BRANCH.S OF REDMOND ROAD.EPA SPLIT	0-3 in	0	SPLT	WH1411	M	50 GRABS
WH1451	10-JUL-88	SO	SOIL.2510-2940 FT 6 IN ABOVE WATER. E ROCKY BRANCH LEFT BANK.EPA SPLIT	0-3 in.	5	SPLT	WH1449	A	37 GRABS
WH2028	11-JUL-88	SO	SOIL. OLD SLUDGE DRYING BEDS OLD TREATMENT PLAN EPA SPLIT	0-3 in	0	SPLT	WH2026	E1	73 GRABS
WH2041	11-JUL-88	SO	SOIL ROW 1. WEST 500-750 FEET W ROCKY BRANCH. EPA SPLIT	0-3 in	0	SPLT	WH2039	C	48 GRABS
WH2047	11-JUL-88	SE	SEDIMENT EAST ROCKY BRANCH AT 1704 HILL ROAD PROPERTY LINE EPA SPLIT	0-1 in	- 25	SPLT	WH2045	B	NA
WH2095	14-JUL-88	SO	SOIL ROW 1. WEST 2202 BRADEN EPA SPLIT	0-3 in	0	SPLT	WH2092	C	49 GRABS
WH2105	15 JUL 88	SO	SOIL ROW 1. WEST 618 ALTA COVE. EPA SPLIT	0-3 in	0	SPLT	WH2103	C	44 GRABS
WH2192	19-JUL-88	SO	SOIL ROW 1 NORTH. 605 BROOKHAVEN COURT EPA SPLIT	0-3 in	0	SPLT	WH2190	C	14 GRABS
WH2211	21-JUL-88	CO	SLUDGE EAST HALF OF NORTH OXIDATION POND INTERFACE EPA SPLIT	0-3 in	-5	SPLT	WH2209	G1	4 CORINGS
WH2223	22-JUL-88	SE	SLUDGE.S QUADRANT AERATION BASIN TOP SEDIMENT/SLUDGE. EPA SPLIT	0-2 in	-12	SPLT	WH2222	F	6 GRABS
WH2231	22-JUL-88	CO	SLUDGE SOUTH QUADRANT AERATION BASIN INTERFACE EPA SPLIT	0-1 in	-15	SPLT	WH2229	F	6 CORINGS
WH2239	23 JUL 88	SO	SOIL SOUTH. MANHOLE NUMBER 2735 AT 617 OAKLEY. EPA SPLIT	0-3 in	0	SPLT	WH2238	C	35 GRABS
WH2248	25-JUL 88	SO	SOIL. 2111 BRADEN BETWEEN PLANTS & HOUSE 4 FT. ON WEST SIDE EPA SPLIT	0-3 in	0	SPLT	WH2247	D	NA
WH2251	24-JUL-88	SO	SOIL. ROW 3 WEST. 0-250 FT WEST ROCKY BRANCH. EPA SPLIT	0-3 in	0	SPLT	WH2250	C	50 GRABS
WH2265	25-JUL-88	SO	SOIL ROW 3. WEST. 500-750 FT WEST ROCKY BRANCH EPA SPLIT	0-3 in	0	SPLT	WH2263	C	48 GRABS
WH2279	25 JUL 88	SO	SOIL ROW 3 SOUTH 2112 WEST LANE EPA SPLIT	0-3 in	0	SPLT	WH2278	C	32 GRABS
WH2288	26-JUL-88	SO	SOIL ROW 3 NORTH 2203 BRADEN EPA SPLIT	0-3 in	0	SPLT	WH2287	C	27 GRABS
WH2315	26-JUL-88	SO	SOIL SOUTH MARKER NORTH OF DITCH. MANHOLE #2745 1704 HILL.EPA SPLIT	0-3 in	0	SPLT	WH2314	C	40 GRABS
WH2323	10 AUG 88	SO	SOIL ROW 1. WEST 1704 HILL ROAD REVISED EPA SPLIT	0-3 in	0	SPLT	WH2321	C	21 GRABS
WH2331	10 AUG-88	SO	SOIL. SOUTH 1704 HILL RD . MANHOLE #2745 DITCH EPA SPLIT REVISED	0-3 in	0	SPLT	WH2329	C	36 GRABS
WH2335	10-AUG-88	SO	SOIL NORTH. 1704 HILL RD NORTH OF DITCH EPA SPLIT	0-3 in	0	SPLT	WH2334	C	24 GRABS
WH2342	11 AUG-88	SE	SEDIMENT BAYOU METO AT STP OUTFALL EPA SPLIT	0-1 in	0	SPLT	WH2341	G3	10 GRABS

TABLE A-3
SOIL AND SEDIMENT SAMPLES COLLECTED AND SPLIT WITH EPA

SAMPLE NUMBER	DATE SAMPLED	SAMP TYPE	SAMPLE LOCATION DESCRIPTION	DEPTH OF TAKE	FEET ABOVE WATER	QC	QC PARTNER	REFERENCE AREAS	UNITS IN COMPOSITE
WH2346	11-AUG-88	SO	SOIL, BAYOU METO AT STP OUTFALL, 6 IN., RIGHT BANK, EPA SPLIT.	0-3 in.	0	SPLT	WH2345	G3	26 GRABS
WH2350	11-AUG-88	SO	SOIL, BAYOU METO AT STP OUTFALL, 36 IN., LEFT BANK, EPA SPLIT.	0-3 in.	0	SPLT	WH2349	G3	26 GRABS
WH2356	11-AUG-88	SO	SOIL, NORTHWEST, 1704 HILL ROAD, NORTH OF POOL, EPA SPLIT	0-3 in.	0	SPLT	WH2355	C	36 GRABS
WH2361	11-AUG-88	SO	SOIL, SOUTH, 1712 HILL ROAD,MANHOLE NUMBER 2741, EPA SPLIT.	0-3 in.	0	SPLT	WH2360	C	35 GRABS
WH2364	11-AUG-88	SO	SOIL, WEST, 1804 HILL ROAD, MANHOLE NUMBER 2740, EPA SPLIT.	0-3 in.	0	SPLT	WH2363	C	35 GRABS
WH2368	11-AUG-88	SO	SOIL, DITCH IN BACKYARD OF 1712 AND 1804 HILL ROAD, EPA SPLIT.	0-3 in.	0	SPLT	WH2366	C	7 GRABS
WH2369	11-AUG-88	SO	SOIL, DITCH BEHIND 1704 HILL ROAD, EPA SPLIT.	0-3 in.	0	SPLT	WH2371	C	10 GRABS

32 records selected.

018879 001

APPENDIX
B

APPENDIX B

SUMMARY DATA REPORT FORMS

SEMI-ISOMER SPECIFIC TCDD

The following report forms for semi-isomer specific TCDD analyses are extracted from analytical reports prepared by TMS Analytical Services, Inc. See Tables A-1 and A-2 (Appendix A) for identification and description of samples. The complete reports of these analyses are located in Volume III.

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0706
DATE: 07/09/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/06/88	1923	0.13#	65.10	0.300 U			NG/GM	
SOILBLANK	OCL34615	07/06/88	1935	0.05#	67.54	0.300 U			NG/GM	
SOILSPIKE	OCL35590	07/06/88	1947	1.12	76.72	0.845			NG/GM	
SOIL PE	PE-A	07/06/88	1959	1.10	67.61	0.830			NG/GM	
1352	1352	07/06/88	2010	0.68#	67.99	0.300 U			NG/GM	
1354	1354									
1355	1355									
1361	1361									
1362	1362									
1367	1367									
1368	1368									
1374	1374									
1375	1375									
1377	1377									
1378	1378	07/07/88	1059	0.94#	101.61	0.300 U			NG/GM	
1384	1384									
1385	1385									
1392	1392	07/07/88	1200	148#	99.59	0.300 U			NG/GM	
1393	1393	07/07/88	1219	0.72#	102.40	0.300 U			NG/GM	
1398	1398	07/07/88	1229	0.42#	103.08	0.300 U			NG/GM	

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

NOTE FROM HERCULES WITH AGREEMENT OF EPA RPM: Data for samples 1354, 1355, 1361, 1362, 1367, 1368, 1374, 1375, 1377, 1384 and 1385 have not been confirmed due to analytical difficulties and are therefore not reported here. The data will be reported in a supplement to the Report on Fine Grid Sampling Plan.

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0706
DATE: 07/09/88

SURROGATE CONC 0.05 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL0643	METHBLANK	METHBLNK	07/06/88	1923	5.00	654	5120	141351	521065	0.13	65.10	0.003	NG/GM
JUL0644	SOILBLANK	OCL34615	07/06/88	1935	5.00	329	6891	142665	506754	0.05	67.54	0.011	NG/GM
JUL0645	SOILSPIKE	OCL35590	07/06/88	1947	5.00	131132	134632	251292	780961	1.12	76.72	0.845	NG/GM
JUL0646	SOIL PE	PE-A	07/06/88	1959	5.00	96494	87405	145066	511247	1.10	67.61	0.830	NG/GM
JUL0647	1352	1352	07/06/88	2010	5.02	4913	7217	119640	422138	0.68	67.99	0.045	NG/GM
JUL0648	1354	1354											
JUL0649	1355	1355											
JUL0650	1361	1361											
JUL0651	1362	1362											
JUL0652	1367	1367											
JUL0653	1368	1368											
JUL0654	1374	1374											
JUL0655	1375	1375											
JUL0708	1377	1377											
JUL0709	1378	1378	07/07/88	1059	5.28	16815	17851	129547	305548	0.94	101.61	0.233	NG/GM
JUL0710	1384	1384											
JUL0714	1385	1385											
JUL0715	1392	1392	07/07/88	1200	5.11	148	1	62748	151212	149	99.59	-0.020	NG/GM
JUL0717	1393	1393	07/07/88	1219	4.92	2655	3700	121237	284092	0.72	102.40	0.031	NG/GM
JUL0718	1398	1398	07/07/88	1229	4.84	1193	2813	144516	336440	0.42	103.08	0.006	NG/GM

NOTE FROM HERCULES WITH AGREEMENT OF EPA RPM: Data for samples 1354, 1355, 1361, 1362, 1367, 1368, 1374, 1375, 1377, 1384 and 1385 have not been confirmed due to analytical difficulties and are therefore not reported here. The data will be reported in a supplement to the Report on Fine Grid Sampling Plan.

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: MES
CASE: 9716
DATE: 09/16/88

SPEC #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	REPUN CODE	VALID CODE	UNITS	COMMENTS
1353	1353	07/07/88	1422	0.15*	102.62	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
1358	1358	07/07/88	1422	125*	105.61	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
1442	1442	07/07/88	1442	1.25*	103.85	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
METHBLANK	METHBLK2	07/07/23	1451	0.31*	102.61	0.300 U			NG/GM	
SOILBLANK	SOILBLK2	07/07/88	1501	1.00*	91.74	0.300 U			NG/GM	
SOILSPIKE	SOILSPK2	07/07/88	1512	1.04	111.54	0.783			NG/GM	
SOIL PE	SOIL PE2	07/07/88	1521	1.02	104.69	4.048			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

REPUN CODES:
A AUTOMATIC REPUN
R REQUESTED REPUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0706
DATE: 07/20/88

SURROGATE CONC 0.06 RF NATIVE 2.105 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.033 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL0720	1353	1353	07/07/88	1422	0.04	722	4702	260632	609532	0.15	102.62	-0.223	NG/GM
JUL0721	1358	1358	07/07/88	1432	0.04	135	1	136212	309553	135	105.61	-2.730	NG/GM
JUL722	1442	1442	07/07/88	1442	0.02	1300	1040	147866	341698	1.25	103.85	-1.661	NG/GM
JUL0723	METHBLANK	METHBLK2	07/07/23	1451	5.00	885	2642	117078	273807	0.31	102.61	0.009	NG/GM
JUL0724	SOILBLANK	SOILBLK2	07/07/98	1501	5.00	1	1	50337	131682	1.00	91.74	-0.023	NG/GM
JUL0725	SOILSPIKE	SOILSPK2	07/07/88	1512	5.00	23461	22611	63291	135633	1.04	111.54	0.783	NG/GM
JUL0707	SOIL PE	SOIL PE2	07/07/88	1521	5.00	186358	183323	95926	215299	1.02	104.69	4.048	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: MEP
CASE: 0706
DATE: 07/14/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/07/88	1451	0.31#	102.61	0.300 U			NG/GM	
SOILBLANK	OCL34334	07/06/88	1501	1.00#	91.74	0.300 U			NG/GM	
SOILSPIKE	OCL35723	07/07/88	1512	1.04	111.54	0.783			NG/GM	
SOIL PE	PE-B	07/07/88	1521	1.02	104.69	4.048			NG/GM	
1401	1401	07/07/88	1536	0.50#	100.23	0.300 U			NG/GM	
1404	1404	07/07/88	1545	1.27#	98.63	0.300 U			NG/GM	
1405	1405	07/07/88	1557	0.72#	102.83	0.300 U			NG/GM	
1410	1410	07/07/88	1607	1.04	99.49	0.300 U			NG/GM	
1411	1411	07/07/88	1618	1.02	99.14	0.569			NG/GM	
1412	1412	07/07/88	1629	1.07	100.03	0.489			NG/GM	
1414	1414	07/07/88	1640	0.85#	101.24	0.300 U			NG/GM	
1415	1415	07/07/88	1651	1.07	101.35	0.387			NG/GM	
1416	1416	07/07/88	1702	747#	99.96	0.300 U			NG/GM	
1418	1418	07/07/88	1713	0.59#	102.18	0.300 U			NG/GM	
1421	1421	07/07/88	1737	1.00#	91.00	0.300 U			NG/GM	
1424	1424	07/07/88	1748	1.06	100.84	0.300 U			NG/GM	
1425	1425	07/07/88	1758	1.05	96.70	0.300 U			NG/GM	
1430	1430	07/07/88	1808	1.05	89.73	0.872			NG/GM	
1431	1431	07/07/88	1819	1.01	99.26	0.475			NG/GM	
1436	1436	07/07/88	1830	1.11	99.83	0.300 U			NG/GM	
1437	1437	07/07/88	1842	1.09	95.80	0.632			NG/GM	
1443	1443	07/07/88	1853	1.05	93.09	0.682			NG/GM	
1444	1444	07/07/88	1904	1.06	96.53	0.333			NG/GM	

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: MEP
CASE: 0706
DATE: 07/14/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.082 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL0723	METHBLANK	METHBLNK	07/07/88	1451	5.00	885	2842	117078	273807	0.31	102.61	0.009	NG/GM
JUL0724	SOILBLANK	OCL34334	07/06/88	1501	5.00	1	1	50337	131682	1.00	91.74	-0.023	NG/GM
JUL0725	SOILSPIKE	OCL35723	07/07/88	1512	5.00	23461	22611	63291	135633	1.04	111.54	0.783	NG/GM
JUL0726	SOIL PE	PE-8	07/07/88	1521	5.00	186358	183323	95926	215299	1.02	104.69	4.048	NG/GM
JUL0727	1401	1401	07/07/88	1536	4.82	3098	6185	89098	213264	0.50	100.23	0.083	NG/GM
JUL0728	1404	1404	07/07/88	1545	5.11	3035	2382	130234	316814	1.27	98.63	0.017	NG/GM
JUL0729	1405	1405	07/07/88	1557	5.33	2201	3073	105080	245207	0.72	102.83	0.026	NG/GM
JUL0730	1410	1410	07/07/88	1607	5.03	7801	7517	145278	350260	1.04	99.49	0.060	NG/GM
JUL0731	1411	1411	07/07/88	1618	4.83	35715	35161	121646	293535	1.02	99.14	0.569	NG/GM
JUL0732	1412	1412	07/07/88	1629	4.96	13135	12299	49641	118757	1.07	100.03	0.489	NG/GM
JUL0733	1414	1414	07/07/88	1640	4.99	9816	11604	105785	250527	0.85	101.24	0.180	NG/GM
JUL0734	1415	1415	07/07/88	1651	5.25	22460	20954	101540	239876	1.07	101.35	0.387	NG/GM
JUL0735	1416	1416	07/07/88	1702	4.89	747	1	62598	150272	747	99.96	-0.011	NG/GM
JUL0736	1418	1418	07/07/88	1713	4.97	2482	4170	67353	158137	0.59	102.18	0.077	NG/GM
JUL0738	1421	1421	07/07/88	1737	5.01	3200	3202	65368	172307	1.00	91.00	0.065	NG/GM
JUL0739	1424	1424	07/07/88	1748	5.04	4531	4260	164640	391747	1.06	100.84	0.030	NG/GM
JUL0740	1425	1425	07/07/88	1758	4.94	12720	12160	200054	496149	1.05	96.70	0.097	NG/GM
JUL0741	1430	1430	07/07/88	1808	4.99	75984	72140	147833	393222	1.05	89.73	0.872	NG/GM
JUL0742	1431	1431	07/07/88	1819	4.87	36662	36239	147733	356229	1.01	99.26	0.475	NG/GM
JUL0743	1436	1436	07/07/88	1830	4.85	22213	19926	146666	352024	1.11	99.83	0.269	NG/GM
JUL0744	1437	1437	07/07/88	1842	4.92	52700	48536	152084	379584	1.09	95.80	0.632	NG/GM
JUL0745	1443	1443	07/07/88	1853	5.12	39084	37063	97561	250452	1.05	93.09	0.682	NG/GM
JUL0746	1444	1444	07/07/88	1904	4.89	37960	35685	200999	498731	1.06	96.53	0.335	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0708
DATE: 07/18/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/08/88	1708	0.96#	83.70	0.300 U			NG/GM	
SOILBLANK	OCL34334	07/08/88	1719	0.00#	71.23	0.300 U			NG/GM	
SOILSPIKE	OCL35590	07/08/88	1730	1.11	96.48	0.833			NG/GM	
SOIL PE	PE-A	07/08/88	1744	1.14	83.29	0.611			NG/GM	
1446	1446	07/08/88	1755	0.00#	82.69	0.300 U			NG/GM	
1448	1448	07/08/88	1805	0.00#	82.71	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
1452	1452	07/08/88	1815	1.03	83.73	0.300 U			NG/GM	
1453	1453	07/08/88	1826	1.09	79.13	0.300 U			NG/GM	
1454	1454	07/08/88	1837	1.04	86.36	0.300 U			NG/GM	
1455	1455	07/08/88	1848	1.11	84.63	0.300 U			NG/GM	
1459	1459	07/08/88	1859	0.00#	83.28	0.300 U			NG/GM	
1460	1460	07/08/88	1910	0.57#	87.05	0.300 U			NG/GM	
1461	1461	07/08/88	1920	0.65#	84.39	0.300 U			NG/GM	
1462	1462	07/08/88	1932	2.60#	82.24	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0708
DATE: 07/18/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL0838	METHBLANK	METHBLNK	07/08/88	1708	5.00	2154	2201	162621	466203	0.98	83.70	-0.001	NG/GM
JUL0839	SOILBLANK	OCL34334	07/08/88	1719	5.00	1	1914	94783	319356	0.00	71.23	-0.009	NG/GM
JUL0840	SOILSPIKE	OCL35590	07/08/88	1730	5.00	65332	59047	139218	344544	1.11	96.48	0.833	NG/GM
JUL0841	SOIL PE	PE-A	07/08/88	1744	5.00	107299	94272	199974	572914	1.14	83.29	0.811	NG/GM
JUL0842	1446	1446	07/08/88	1755	5.04	1	924	100360	290595	0.00	82.89	-0.015	NG/GM
JUL0843	1448	1448	07/08/88	1805	1.00	1	771	307057	890939	0.00	82.71	-0.104	NG/GM
JUL0844	1452	1452	07/08/88	1815	5.04	6337	6150	137454	393784	1.03	83.73	0.052	NG/GM
JUL0845	1453	1453	07/08/88	1826	5.03	15377	14066	83541	252865	1.09	79.13	0.252	NG/GM
JUL0846	1454	1454	07/08/88	1837	5.04	12492	12060	87656	243238	1.04	86.36	0.215	NG/GM
JUL0847	1455	1455	07/08/88	1848	5.03	16091	14488	87479	247592	1.11	84.63	0.268	NG/GM
JUL0848	1459	1459	07/08/88	1859	5.09	1	1065	66358	191229	0.00	83.28	-0.009	NG/GM
JUL0849	1460	1460	07/08/88	1910	5.05	2278	3963	78328	215880	0.57	87.05	0.045	NG/GM
JUL0850	1461	1461	07/08/88	1920	5.02	980	1504	74514	211877	0.65	84.39	0.005	NG/GM
JUL0851	1462	1462	07/08/88	1932	1.00	1823	701	234710	684859	2.60	82.24	-0.071	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0712
DATE: 07/16/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/13/88	0750	1.00#	80.89	0.300 U			NG/GM	
SOILBLANK	OCL34373	07/13/88	0801	1.00#	68.40	0.300 U			NG/GM	
SOILSPIKE	OCL35612	07/13/88	0813	1.12	80.42	0.806			NG/GM	
SOIL PE	PE-A	07/13/88	0824	1.14	72.40	0.792			NG/GM	
WH1449	WH1449	07/13/88	0835	1.05	70.83	0.304			NG/GM	
WH1450	WH1450	07/13/88	0848	1.09	74.02	0.300 U			NG/GM	
WH1466	WH1466	07/13/88	0904	1.13	75.14	0.300 U			NG/GM	
WH1467	WH1467	07/13/88	0919	1.16	70.18	0.300 U			NG/GM	
WH1468	WH1468	07/13/88	0934	1.18	74.76	0.300 U			NG/GM	
WH1469	WH1469	07/13/88	0948	1.08	77.20	0.300 U			NG/GM	
WH1471	WH1471	07/13/88	1001	1.00#	77.49	0.300 U			NG/GM	
WH1474	WH1474	07/13/88	1011	1.11	78.10	3.309			NG/GM	
WH1475	WH1475	07/13/88	1021	1.15	77.17	0.300 U			NG/GM	
WH1476	WH1476	07/13/88	1033	0.52#	77.66	0.300 U			NG/GM	
WH1480	WH1480	07/13/88	1043	0.69#	77.49	0.300 U			NG/GM	
WH1481	WH1481	07/13/88	1053	0.17#	78.67	0.300 U			NG/GM	
WH1482	WH1482	07/13/88	1104	1.00#	80.29	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH1483	WH1483	07/13/88	1114	1.00#	78.58	0.300 U			NG/GM	
WH1490	WH1490	07/13/88	1124	1.00#	77.74	0.300 U			NG/GM	
WH1491	WH1491	07/13/88	1248	1.00#	88.33	0.300 U			NG/GM	
WH1492	WH1492	07/13/88	1341	1.00#	73.87	0.300 U			NG/GM	
WH1493	WH1493	07/13/88	1308	1.00#	89.92	0.300 U			NG/GM	
WH1494	WH1494	07/13/88	1354	1.00#	84.41	0.300 U			NG/GM	
WH1495	WH1495	07/13/88	1328	0.70#	78.11	0.300 U			NG/GM	

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0712
DATE: 07/19/88

SURROGATE CONC 0.05 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL1302	METHBLANK	METHBLNK	07/13/88	0750	5.00	1	1	46240	137196	1.00	80.89	-0.023	NG/GM
JUL1303	SOILBLANK	OCL34373	07/13/88	0801	5.00	1	1	56923	199725	1.00	68.40	-0.023	NG/GM
JUL1304	SOILSPIKE	OCL35612	07/13/88	0813	5.00	54862	49039	100144	297090	1.12	80.42	0.806	NG/GM
JUL1305	SOIL PE	PE-A	07/13/88	0824	5.00	25993	22877	43163	142146	1.14	72.40	0.792	NG/GM
JUL1306	WH1449	WH1449	07/13/88	0835	5.16	19192	18345	78172	264169	1.05	70.83	0.304	NG/GM
JUL1350	WH1450	WH1450	07/13/88	0848	5.22	9877	9046	45626	147595	1.09	74.02	0.269	NG/GM
JUL1307	WH1466	WH1466	07/13/88	0904	5.04	20170	17905	91702	292211	1.13	75.14	0.284	NG/GM
JUL1308	WH1467	WH1467	07/13/88	0919	5.03	9476	8156	63795	217824	1.16	70.18	0.168	NG/GM
JUL1309	WH1468	WH1468	07/13/88	0934	5.04	7314	6196	46141	147874	1.18	74.76	0.192	NG/GM
JUL1369	WH1469	WH1469	07/13/88	0948	5.14	8431	7790	61251	190140	1.08	77.20	0.175	NG/GM
JUL1310	WH1471	WH1471	07/13/88	1001	5.29	1	1	56159	173939	1.00	77.49	-0.022	NG/GM
JUL1311	WH1474	WH1474	07/13/88	1011	5.25	159362	143536	68556	205371	1.11	78.10	3.309	NG/GM
JUL1312	WH1475	WH1475	07/13/88	1021	5.22	14698	12820	127464	395907	1.15	77.17	0.136	NG/GM
JUL1313	WH1476	WH1476	07/13/88	1033	5.09	1458	2827	69584	215007	0.52	77.66	0.024	NG/GM
JUL1314	WH1480	WH1480	07/13/88	1043	5.08	3302	4780	84249	260815	0.69	77.49	0.050	NG/GM
JUL1315	WH1481	WH1481	07/13/88	1053	5.08	552	3344	68752	209727	0.17	78.67	0.021	NG/GM
JUL1316	WH1482	WH1482	07/13/88	1104	1.00	1	1	95415	285217	1.00	80.29	-0.114	NG/GM
JUL1317	WH1483	WH1483	07/13/88	1114	5.06	1	1	27242	83200	1.00	78.58	-0.023	NG/GM
JUL1318	WH1490	WH1490	07/13/88	1124	5.27	1	1	46933	144898	1.00	77.74	-0.022	NG/GM
JUL1319	WH1491	WH1491	07/13/88	1248	5.18	1	1	59337	161224	1.00	88.33	-0.022	NG/GM
JUL1324	WH1492	WH1492	07/13/88	1341	5.24	1	1	34988	113679	1.00	73.87	-0.022	NG/GM
JUL1321	WH1493	WH1493	07/13/88	1308	5.03	1	1	16327	43579	1.00	89.92	-0.023	NG/GM
JUL1325	WH1494	WH1494	07/13/88	1354	5.15	1	1	21950	62413	1.00	84.41	-0.022	NG/GM
JUL1323	WH1495	WH1495	07/13/88	1328	5.06	4089	5860	111623	342832	0.70	78.11	0.045	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 9712
DATE: 07/18/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/14/88	1600	1.00#	93.25	0.300 U			NG/GM	
SOILBLANK	OCL34648	07/14/88	1623	1.00#	89.96	0.300 U			NG/GM	
SOILSPIKE	OCL35568	07/14/88	1633	1.03	103.10	0.896			NG/GM	
SOIL PE	PE-B	07/14/88	1643	1.08	91.43	4.016			NG/GM	
WH1496	WH1496	07/14/88	2319	0.60#	84.07	0.300 U			NG/GM	
WH1497	WH1497	07/14/88	1706	4.21#	92.76	0.300 U			NG/GM	
WH1498	WH1498	07/14/88	1721	0.00#	94.42	0.300 U			NG/GM	
WH1499	WH1499	07/14/88	2257	1.00#	89.22	0.300 U			NG/GM	
WH2000	WH2000	07/14/88	1739	1.00#	92.70	0.300 U			NG/GM	
WH2004	WH2004	07/14/88	1749	1.00#	97.99	0.300 U			NG/GM	
WH2005	WH2005	07/14/88	1801	1.14	89.68	0.300 U			NG/GM	
WH2006	WH2006	07/14/88	1813	1.02	91.43	0.300 U			NG/GM	
WH2010	WH2010	07/14/88	1826	1.00#	93.63	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2015	WH2015	07/14/88	1836	1.00#	91.20	0.300 U			NG/GM	
WH2016	WH2016	07/14/88	1849	1.03	88.21	2.159			NG/GM	
WH2017	WH2017	07/14/88	1907	1.00#	89.53	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2023	WH2023	07/14/88	2151	1.03	93.64	2.138			NG/GM	
WH2024	WH2024	07/14/88	2307	1.14	82.47	0.300 U			NG/GM	
WH2025	WH2025	07/14/88	2203	1.09	83.33	2.172			NG/GM	
WH2026	WH2026	07/14/88	2214	1.06	82.76	4.750			NG/GM	
WH2027	WH2027	07/14/88	2225	1.12	84.82	2.843			NG/GM	
WH2029	WH2029	07/14/88	2235	1.12	83.73	0.970			NG/GM	
WH2030	WH2030	07/14/88	2246	1.01	83.30	0.307			NG/GM	

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0712
DATE: 07/19/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL1416	METHBLANK	METHBLNK	07/14/88	1600	5.00	1	1	212409	546673	1.00	93.25	-0.023	NG/GM
JUL1417	SOILBLANK	OCL34648	07/14/88	1623	5.00	1	1	136027	362911	1.00	89.96	-0.023	NG/GM
JUL1418	SOILSPIKE	OCL35568	07/14/88	1633	5.00	52046	50371	114036	264147	1.03	103.10	0.896	NG/GM
JUL1419	SOIL PE	PE-B	07/14/88	1643	5.00	407764	376653	179854	460543	1.08	91.43	4.016	NG/GM
JUL1443	WH1496	WH1496	07/14/88	2319	5.01	1839	3078	119423	340878	0.60	84.07	0.011	NG/GM
JUL1421	WH1497	WH1497	07/14/88	1706	4.88	1983	471	92002	237992	4.21	92.76	0.092	NG/GM
JUL1423	WH1498	WH1498	07/14/88	1721	5.15	1	1810	59618	151546	0.00	91.42	0.005	NG/GM
JUL1441	WH1499	WH1499	07/14/88	2257	4.84	1	1	61650	167716	1.00	88.22	-0.024	NG/GM
JUL1425	WH2000	WH2000	07/14/88	1739	5.14	1	1	49767	128845	1.00	92.70	-0.022	NG/GM
JUL1426	WH2004	WH2004	07/14/88	1749	4.99	1	1	17754	43485	1.00	97.96	-0.023	NG/GM
JUL1427	WH2005	WH2005	07/14/88	1801	4.97	9168	8020	72657	194178	1.14	89.68	0.168	NG/GM
JUL1428	WH2006	WH2006	07/14/88	1813	5.17	13841	13543	133451	349912	1.02	91.43	0.157	NG/GM
JUL1429	WH2010	WH2010	07/14/88	1826	1.00	1	1	110769	283937	1.00	93.63	-0.114	NG/GM
JUL1430	WH2015	WH2015	07/14/88	1836	5.03	1	1	150734	396654	1.00	91.20	-0.023	NG/GM
JUL1431	WH2016	WH2016	07/14/88	1849	4.83	115501	111682	95147	255477	1.03	88.21	2.159	NG/GM
JUL1432	WH2017	WH2017	07/14/88	1907	1.00	1	1	244060	654209	1.00	89.53	-0.114	NG/GM
JUL1434	WH2023	WH2023	07/14/88	2151	5.06	35297	38079	33168	83919	1.03	93.64	2.138	NG/GM
JUL1442	WH2024	WH2024	07/14/88	2307	4.97	12167	10663	106653	309997	1.14	82.47	0.153	NG/GM
JUL1435	WH2025	WH2025	07/14/88	2203	4.82	34570	31839	26203	74394	1.09	83.33	2.172	NG/GM
JUL1436	WH2026	WH2026	07/14/88	2214	4.87	94550	89276	33348	93746	1.06	82.76	4.750	NG/GM
JUL1437	WH2027	WH2027	07/14/88	2225	5.03	49386	43949	27667	76774	1.12	84.82	2.843	NG/GM
JUL1438	WH2029	WH2029	07/14/88	2235	5.01	109729	97559	173467	493829	1.12	83.73	0.970	NG/GM
JUL1440	WH2030	WH2030	07/14/88	2246	5.12	9189	9090	44715	128544	1.01	83.30	0.307	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 6712
DATE: 07/18/89

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE REC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/15/88	0027	0.18#	91.46	0.300 U			NG/GM	
SOILBLANK	OCL34621	07/15/88	0915	1.00#	75.93	0.300 U			NG/GM	
SOILSPIKE	OCL35590	07/15/88	0926	1.08	90.29	0.841			NG/GM	
SOIL PE	PE-A	07/15/88	0939	1.08	77.22	0.755			NG/GM	
WH2031	WH2031	07/15/88	0949	1.09	65.66	2.889			NG/GM	
WH2032	WH2032	07/15/88	1001	1.08	74.89	2.958			NG/GM	
WH2033	WH2033	07/15/88	1014	1.09	75.62	2.716			NG/GM	
WH2037	WH2037	07/15/88	1025	1.11	78.13	1.246			NG/GM	
WH2038	WH2038	07/15/88	1038	1.11	75.87	1.826			NG/GM	
WH2039	WH2039	07/15/88	1049	1.06	76.31	1.308			NG/GM	
WH2040	WH2040	07/15/88	1100	1.18	74.75	1.650			NG/GM	
WH2045	WH2045	07/15/88	1110	0.45#	78.23	0.300 U			NG/GM	
WH2046	WH2046	07/15/88	1121	0.05#	80.59	0.300 U			NG/GM	
WH2048	WH2048	07/15/88	1135	0.23#	79.81	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: LEP
CASE: 9712
DATE: 07/16/89

SURROGATE CONC 0.06 RELATIVE 2.109 ION RATIO: 1.009 TO 1.232
INTERNAL STD CONC 1.05 RF SURROGATE 2.063 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR REC	RAW VALUE	UNITS
JUL1446	METHBLANK	METHBLNK	07/15/88	0027	5.00	466	2676	320056	942976	0.18	81.46	-0.015	NG/GM
JUL1502	SOILBLANK	OCL34621	07/15/88	0915	5.00	1	1	46670	140125	1.00	79.93	-0.023	NG/GM
JUL1503	SOILSPIKE	OCL35590	07/15/88	0926	5.00	198592	183398	196375	1047986	1.08	90.29	0.941	NG/GM
JUL1504	SOIL PE	PE-A	07/15/88	0939	5.00	80716	74704	153292	477741	1.08	77.22	0.755	NG/GM
JUL1505	WH2031	WH2031	07/15/88	0949	4.38	742875	691093	332671	1187696	1.09	65.69	2.389	NG/GM
JUL1506	WH2032	WH2032	07/15/88	1001	4.82	192894	178485	97663	306308	1.08	74.89	2.953	NG/GM
JUL1507	WH2033	WH2033	07/15/88	1014	4.93	227304	209208	122931	392355	1.09	75.62	2.716	NG/GM
JUL1508	WH2037	WH2037	07/15/88	1025	4.94	30291	27366	35822	105030	1.11	78.13	1.246	NG/GM
JUL1509	WH2038	WH2038	07/15/88	1038	5.00	109047	98173	85185	265731	1.11	75.87	1.826	NG/GM
JUL1510	WH2039	WH2039	07/15/88	1049	4.86	62609	58795	71376	222342	1.06	76.31	1.308	NG/GM
JUL1511	WH2040	WH2040	07/15/88	1100	5.16	42395	35826	33936	107492	1.18	74.75	1.650	NG/GM
JUL1512	WH2045	WH2045	07/15/88	1110	4.88	1308	2937	86135	264193	0.45	78.23	0.016	NG/GM
JUL1513	WH2046	WH2046	07/15/88	1121	4.97	122	2404	98284	292674	0.05	80.59	-0.002	NG/GM
JUL1514	WH2048	WH2048	07/15/88	1135	1.00	850	3695	276287	830608	0.23	79.81	-0.050	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HEP
CASE: 0714
DATE: 07/16/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/15/88	1145	1.49*	75.69	0.300 U			NG/GM	
SOILBLANK	OCL34394	07/15/88	1155	1.00*	90.69	0.300 U			NG/GM	
SOILSPIKE	OCL35514	07/15/88	1207	1.21	92.76	0.774			NG/GM	
SOIL PE	PE-A	07/15/88	1218	1.06	83.05	0.761			NG/GM	
WH2049	WH2049	07/15/88	1229	1.00*	81.10	0.300 U			NG/GM	
WH2050	WH2050	07/15/88	1239	1.00*	83.92	0.300 U			NG/GM	
WH2051	WH2051	07/15/88	1249	1.00*	82.02	0.300 U			NG/GM	
WH2052	WH2052	07/15/88	1259	0.25*	80.76	0.300 U			NG/GM	
WH2053	WH2053	07/15/88	1310	1.14	79.53	0.412			NG/GM	
WH2054	WH2054	07/15/88	1320	1.05	80.05	0.728			NG/GM	
WH2055A	WH2055A	07/15/88	1332	1.11	80.54	0.857			NG/GM	
WH2056B	WH2056B	07/15/88	1343	1.13	82.52	0.820			NG/GM	
WH2057C	WH2057C	07/15/88	1354	1.08	81.91	1.185			NG/GM	
WH2058D	WH2058D	07/15/88	1405	1.04	82.48	1.172			NG/GM	
WH2059	WH2059	07/15/88	1416	1.07	81.57	0.922			NG/GM	
WH2062	WH2062	07/15/88	1426	0.01*	84.33	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2064	WH2064	07/15/88	1436	1.00*	79.86	0.300 U			NG/GM	
WH2065	WH2065	07/15/88	1446	0.43*	86.39	0.300 U			NG/GM	
WH2066	WH2066	07/15/88	1500	1.06	82.39	0.300 U			NG/GM	
WH2067	WH2067	07/15/88	1511	0.99*	80.96	0.300 U			NG/GM	
WH2068	WH2068	07/15/88	1523	1.11	81.22	0.300 U			NG/GM	
WH2072	WH2072	07/15/88	1535	1.00*	79.87	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0714
DATE: 07/16/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL1515	METHBLANK	METHBLNK	07/15/88	1145	5.00	1491	1	12472	39495	1491	75.69	0.067	NG/GM
JUL1516	SOILBLANK	OCL34784	07/15/88	1155	5.00	1	1	17030	45066	1.00	90.65	-0.023	NG/GM
JUL1517	SOILSPIKE	OCL35514	07/15/88	1207	5.00	15334	12720	32416	83421	1.21	92.78	0.774	NG/GM
JUL1518	SOIL PE	PE-A	07/15/88	1213	5.00	37949	35243	77003	221350	1.08	83.05	0.761	NG/GM
JUL1519	WH2049	WH2049	07/15/88	1229	5.05	1	1	141271	418044	1.00	81.10	-0.023	NG/GM
JUL1520	WH2050	WH2050	07/15/88	1239	5.04	1	1	68217	195094	1.00	83.92	-0.023	NG/GM
JUL1521	WH2051	WH2051	07/15/88	1249	5.07	1	1	110739	324027	1.00	82.02	-0.023	NG/GM
JUL1522	WH2052	WH2052	07/15/88	1259	4.90	441	1604	120104	356905	0.28	90.76	-0.009	NG/GM
JUL1523	WH2053	WH2053	07/15/88	1310	4.89	12914	11332	44855	134936	1.14	79.53	0.412	NG/GM
JUL1524	WH2054	WH2054	07/15/88	1320	5.16	53210	50741	106779	318432	1.05	80.05	0.728	NG/GM
JUL1525	WH2055A	WH2055A	07/15/88	1332	5.09	46812	42298	79725	236074	1.11	80.54	0.857	NG/GM
JUL1526	WH2056B	WH2056B	07/15/88	1343	5.04	32969	29197	60043	173602	1.13	82.52	0.829	NG/GM
JUL1527	WH2057C	WH2057C	07/15/88	1354	4.88	28485	26481	38490	110521	1.08	82.91	1.185	NG/GM
JUL1528	WH2058D	WH2058D	07/15/88	1405	4.89	61068	58715	84161	242959	1.04	82.45	1.172	NG/GM
JUL1529	WH2059	WH2059	07/15/88	1416	5.11	109646	102428	178499	521730	1.07	81.57	0.922	NG/GM
JUL1530	WH2062	WH2062	07/15/88	1426	1.00	31	2335	162355	462070	0.01	84.33	-0.054	NG/GM
JUL1531	WH2064	WH2064	07/15/88	1436	5.07	1	1	45276	136037	1.00	79.68	-0.023	NG/GM
JUL1532	WH2065	WH2065	07/15/88	1449	5.05	581	1340	12734	36138	0.43	86.39	0.096	NG/GM
JUL1533	WH2066	WH2066	07/15/88	1500	4.97	20688	19717	175839	505398	1.06	83.39	0.169	NG/GM
JUL1534	WH2067	WH2067	07/15/88	1511	5.01	14964	17006	207711	615293	0.88	80.96	0.100	NG/GM
JUL1535	WH2068	WH2068	07/15/88	1523	5.14	11642	10500	127764	377185	1.11	81.22	0.117	NG/GM
JUL1536	WH2072	WH2072	07/15/88	1535	1.00	1	1	71673	215377	1.00	79.87	-0.114	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HCR
CASE: 0715
DATE: 07/18/88

APEX #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/18/88	0914	0.12*	63.69	0.300 U			NG/GM	
SOILBLANK	OCL34373	07/18/88	0926	0.00*	79.62	0.300 U			NG/GM	
SOILSPIKE	OCL35514	07/18/88	0937	1.08	87.57	0.812			NG/GM	
SOIL PE	PE-A	07/18/88	0948	1.05	75.97	0.812			NG/GM	
WH1479	WH1479	07/18/88	0959	1.09	81.54	0.300 U			NG/GM	
WH2073	WH2073	07/18/88	1011	1.16	75.90	0.546			NG/GM	
WH2074	WH2074	07/18/88	1023	1.14	79.31	0.300 U			NG/GM	
WH2075	WH2075	07/18/88	1035	1.07	76.03	0.300 U			NG/GM	
WH2079	WH2079	07/18/88	1048	1.00*	76.91	0.300 U			NG/GM	
WH2080	WH2080	07/18/88	1059	1.12	75.13	3.498			NG/GM	
WH2081	WH2081	07/18/88	1110	1.08	70.46	4.313			NG/GM	
WH2082	WH2082	07/18/88	1122	1.01	82.50	3.528			NG/GM	
WH2086	WH2086	07/18/88	1133	1.10	77.54	2.329			NG/GM	
WH2087	WH2087	07/18/88	1146	1.09	74.08	1.911			NG/GM	
WH2088	WH2088	07/18/88	1156	1.08	74.22	2.497			NG/GM	
WH2092	WH2092	07/18/88	1207	1.12	77.44	1.727			NG/GM	
WH2093	WH2093	07/18/88	1217	1.07	75.47	1.443			NG/GM	
WH2094	WH2094	07/18/88	1227	1.12	75.85	0.922			NG/GM	
WH2101	WH2101	07/18/88	1238	1.00*	75.60	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2102	WH2102	07/18/88	1248	0.38*	75.45	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

BC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0715
DATE: 07/18/88

SURROGATE CONC 0.05 PF NATIVE 2.109 ION RATIO: 1.009 TO 1.213
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL1802	METHBLANK	METHBLNK	07/18/88	0914	5.00	731	6121	351587	1006204	0.12	83.69	-0.007	NG/GM
JUL1803	SOILBLANK	OCL34373	07/18/88	0926	5.00	1	1153	47975	295344	0.00	79.62	-0.014	NG/GM
JUL1804	SOILSPIKE	OCL35514	07/18/88	0937	5.00	74893	69019	149885	408591	1.08	87.57	0.812	NG/GM
JUL1805	SOIL PE	PE-A	07/18/88	0948	5.00	57231	54404	100957	316976	1.05	75.97	0.812	NG/GM
JUL1806	WH1479	WH1479	07/18/88	0959	5.03	2791	2568	26886	79049	1.09	81.54	0.137	NG/GM
JUL1807	WH2073	WH2073	07/18/88	1011	5.06	22718	19564	55369	174293	1.16	75.90	0.546	NG/GM
JUL1808	WH2074	WH2074	07/18/88	1023	5.12	12410	10872	47195	293703	1.14	79.31	0.161	NG/GM
JUL1809	WH2075	WH2075	07/18/88	1035	5.05	17180	16119	108520	342934	1.07	76.03	0.205	NG/GM
JUL1810	WH2079	WH2079	07/18/88	1048	5.04	1	1	93633	260977	1.00	76.91	-0.023	NG/GM
JUL1811	WH2080	WH2080	07/18/88	1059	5.13	174775	155787	69819	216993	1.12	75.13	3.498	NG/GM
JUL1812	WH2081	WH2081	07/18/88	1110	5.07	281261	260003	88750	291932	1.08	70.46	4.313	NG/GM
JUL1813	WH2082	WH2082	07/18/88	1122	5.03	55919	55276	25980	73818	1.01	82.50	3.528	NG/GM
JUL1814	WH2086	WH2086	07/18/88	1133	5.10	79085	72059	49130	149425	1.10	77.54	2.329	NG/GM
JUL1815	WH2087	WH2087	07/18/88	1146	5.01	147150	135485	108356	345914	1.09	74.08	1.911	NG/GM
JUL1816	WH2088	WH2088	07/18/88	1158	5.02	104856	96613	59519	188211	1.08	74.22	2.467	NG/GM
JUL1817	WH2092	WH2092	07/18/88	1207	5.13	68761	79046	72491	221698	1.12	77.44	1.727	NG/GM
JUL1818	WH2093	WH2093	07/18/88	1217	5.04	88718	82917	67576	275448	1.07	75.47	1.443	NG/GM
JUL1819	WH2094	WH2094	07/18/88	1227	5.07	59509	53289	88876	279185	1.12	75.85	0.822	NG/GM
JUL1820	WH2101	WH2101	07/18/88	1238	1.00	1	1	206008	653984	1.00	75.60	-0.114	NG/GM
JUL1821	WH2102	WH2102	07/18/88	1248	1.00	1049	2734	224393	713621	0.38	75.46	-0.052	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: [illegible]
CASE: [illegible]
DATE: [illegible]

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE REC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/19/88	1447	1.00*	77.04	0.300 U			NG/GM	
SOILBLANK	OCL34329	07/19/88	1500	1.00*	80.19	0.300 U			NG/GM	
SOILSPIKE	OCL35687	07/19/88	1511	1.09	89.28	0.804			NG/GM	
SOIL PE	PE-A1	07/19/88	1524	1.11	76.46	0.782			NG/GM	
WH1477	WH1477	07/19/88	1540	0.93*	76.02	0.300 U			NG/GM	
WH1478	WH1478	07/19/88	1552	0.36*	78.37	0.300 U			NG/GM	
WH2018	WH2018	07/19/88	1604	1.22	77.90	0.300 U			NG/GM	
WH2019	WH2019	07/19/88	1617	1.05	78.07	1.402			NG/GM	
WH2021	WH2021	07/19/88	1631	1.06	81.72	1.520			NG/GM	
WH2022	WH2022	07/19/88	1643	1.12	81.11	1.484			NG/GM	
WH2096	WH2096	07/19/88	1653	1.08	79.74	1.210			NG/GM	
WH2100	WH2100	07/19/88	1705	1.00*	80.75	0.300 U			NG/GM	
WH2103	WH2103	07/19/88	1715	1.13	77.77	0.631			NG/GM	
WH2104	WH2104	07/19/88	1726	1.14	79.33	0.629			NG/GM	
WH2106	WH2106	07/19/88	1736	1.16	77.73	0.838			NG/GM	
WH2107	WH2107	07/19/88	1748	1.07	77.89	1.206			NG/GM	
WH2111	WH2111	07/19/88	1800	1.05	75.86	0.382			NG/GM	
WH2112	WH2112	07/19/88	1812	1.03	76.90	0.482			NG/GM	
WH2113	WH2113	07/19/88	1617	1.02	74.51	0.566			NG/GM	
WH2117	WH2117	07/19/88	1833	0.37*	80.48	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2118	WH2118	07/19/88	1629	0.83*	77.30	0.300 U			NG/GM	
WH2119	WH2119	07/19/88	1854	1.00*	77.51	0.300 U			NG/GM	
WH2120	WH2120	07/19/88	1640	1.09	71.23	5.985			NG/GM	
WH2121	WH2121	07/19/88	1653	1.10	66.58	7.188			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:

A AUTOMATIC RERUN
R REQUESTED RERUN

SD/MS/MS WORKSHEET REPORT FORM

SITE: MEF
CASE: 0719
DATE: 07/21/88

SURROGATE CONC 0.05 | RF NATIVE 2.109 | ION RATIO: [illegible] TO 1.233
INTERNAL STD CONC 1.05 | RF SURROGATE 2.053 | CORRECTION FACTOR: [illegible]

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 265	RATIO 257/259	SURR REC	RAW VALUE	UNITS
JUL1902	METHBLANK	METHBLNK	07/19/88	1447	5.00	1	1	27460	85542	1.00	77.04	-0.023	NG/GM
JUL1903	SOILBLANK	OCL34329	07/19/88	1500	5.00	1	1	44361	132761	1.00	90.19	-0.023	NG/GM
JUL1904	SOILSPIKE	OCL35687	07/19/88	1511	5.00	75735	69400	155604	416109	1.09	89.28	0.804	NG/GM
JUL1905	SOIL PE	PE-A1	07/19/88	1524	5.00	20678	18642	37127	115837	1.11	76.46	0.762	NG/GM
JUL1906	WH1477	WH1477	07/19/88	1540	5.06	2022	2176	60164	189877	0.93	76.02	0.029	NG/GM
JUL1907	WH1478	WH1478	07/19/88	1552	5.21	1108	3099	83400	255379	0.36	78.37	0.016	NG/GM
JUL1908	WH2018	WH2018	07/19/88	1604	5.07	12348	10086	89255	274586	1.22	77.90	0.168	NG/GM
JUL1909	WH2019	WH2019	07/19/88	1617	4.93	78502	74539	84853	258249	1.05	78.07	1.402	NG/GM
JUL1910	WH2021	WH2021	07/19/88	1631	4.66	71202	66887	75075	218216	1.06	81.72	1.520	NG/GM
JUL1911	WH2022	WH2022	07/19/88	1643	5.23	55229	49385	53814	157466	1.12	81.11	1.464	NG/GM
JUL1912	WH2096	WH2096	07/19/88	1653	4.84	33139	30784	42540	126965	1.08	79.74	1.210	NG/GM
JUL1913	WH2100	WH2100	07/19/88	1705	4.98	1	1	51592	153339	1.00	80.75	-0.023	NG/GM
JUL1914	WH2103	WH2103	07/19/88	1715	5.04	32700	29015	72281	221959	1.13	77.77	0.631	NG/GM
JUL1915	WH2104	WH2104	07/19/88	1726	5.12	38960	34300	86533	260522	1.14	79.33	0.629	NG/GM
JUL1916	WH2106	WH2106	07/19/88	1736	5.07	39116	33623	64446	197680	1.16	77.73	0.838	NG/GM
JUL1917	WH2107	WH2107	07/19/88	1748	4.86	48902	45754	61410	187587	1.07	77.89	1.206	NG/GM
JUL1918	WH2111	WH2111	07/19/88	1800	5.09	3990	3783	14199	44785	1.05	75.86	0.382	NG/GM
JUL1918	WH2112	WH2112	07/19/88	1812	5.10	35334	34195	103101	320577	1.03	76.90	0.462	NG/GM
JUL2020	WH2113	WH2113	07/19/88	1617	5.06	57834	56809	141654	454236	1.02	74.51	0.566	NG/GM
JUL1921	WH2117	WH2117	07/19/88	1833	1.00	1481	4004	263178	784791	0.37	80.48	-0.032	NG/GM
JUL2021	WH2118	WH2118	07/19/88	1629	5.04	7528	9085	390860	1213281	0.83	77.30	0.010	NG/GM
JUL1923	WH2119	WH2119	07/19/88	1854	5.11	1	1	21204	65658	1.00	77.51	-0.022	NG/GM
JUL2022	WH2120	WH2120	07/19/88	1640	5.04	2642946	2429230	617978	1986078	1.09	71.23	5.985	NG/GM
JUL2023	WH2121	WH2121	07/19/88	1653	5.04	2476225	2259524	455339	1544893	1.10	66.58	7.192	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0719
DATE: 07/24/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/20/88	1155	1.00#	77.71	0.300 U			NG/GM	
SOILBLANK	OCL34559	07/20/88	1206	0.56#	78.73	0.300 U			NG/GM	
SOILSPIKE	OCL35536	07/20/88	1216	1.12	92.09	0.834			NG/GM	
SOIL PE	PE-B	07/20/88	1227	1.11	74.22	3.897			NG/GM	
WH2122	WH2122	07/20/88	1415	1.06	71.11	6.417			NG/GM	
WH2123	WH2123	07/20/88	1431	1.20	78.95	1.291			NG/GM	
WH2124	WH2124	07/20/88	1443	1.11	66.61	1.843			NG/GM	
WH2125	WH2125	07/20/88	1455	1.12	69.52	2.805			NG/GM	
WH2130	WH2130	07/20/88	1505	0.16#	70.17	0.300 U			NG/GM	
WH2131	WH2131	07/20/88	1516	1.00#	70.05	0.300 U			NG/GM	
WH2132	WH2132	07/20/88	1526	1.00#	72.94	0.300 U			NG/GM	
WH2133	WH2133	07/20/88	1538	0.51#	77.27	0.300 U			NG/GM	
WH2134	WH2134	07/20/88	1549	1.00#	77.64	0.300 U			NG/GM	
WH2135	WH2135	07/20/88	1606	0.89#	71.83	0.300 U			NG/GM	
WH2137	WH2137	07/20/88	1716	0.69#	73.99	0.300 U			NG/GM	
WH2138	WH2138	07/20/88	1727	1.00#	76.12	0.300 U			NG/GM	
WH2139	WH2139	07/20/88	1738	1.33#	76.89	0.300 U			NG/GM	
WH2143	WH2143	07/20/88	1753	1.00#	75.72	0.300 U			NG/GM	
WH2144	WH2144	07/20/88	1803	1.00#	82.12	0.300 U			NG/GM	
WH2146	WH2146	07/20/88	1813	1.00#	75.22	0.300 U			NG/GM	
WH2149	WH2149	07/20/88	1926	0.58#	74.38	0.300 U			NG/GM	
WH2150	WH2150	07/20/88	1936	0.84#	78.37	0.300 U			NG/GM	

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0719
DATE: 07/24/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR RCC	RAW VALUE	UNITS
JUL2006	METHBLANK	METHBLNK	07/20/88	1155	5.00	1	1	212292	655634	1.00	77.71	-0.023	NG/GM
JUL2007	SOILBLANK	OCL34559	07/20/88	1206	5.00	2403	4328	237130	722755	0.56	78.73	-0.001	NG/GM
JUL2008	SOILSPIKE	OCL35536	07/20/88	1216	5.00	52490	46971	106137	275291	1.12	92.09	0.834	NG/GM
JUL2009	SOIL PE	PE-B	07/20/88	1227	5.00	341496	307914	123172	362847	1.11	74.22	3.897	NG/GM
JUL2010	WH2122	WH2122	07/20/88	1415	5.19	329386	311163	70882	223218	1.06	71.11	6.417	NG/GM
JUL2011	WH2123	WH2123	07/20/88	1431	4.94	62777	52296	71203	214461	1.20	78.95	1.291	NG/GM
JUL2012	WH2124	WH2124	07/20/88	1443	4.89	18549	16666	12894	45736	1.11	56.61	1.843	NG/GM
JUL2013	WH2125	WH2125	07/20/88	1455	4.94	149018	132915	70835	229203	1.12	69.52	2.805	NG/GM
JUL2014	WH2130	WH2130	07/20/88	1505	5.50	817	5019	230693	788990	0.16	70.17	-0.005	NG/GM
JUL2015	WH2131	WH2131	07/20/88	1516	5.23	1	1	70027	239927	1.00	70.05	-0.022	NG/GM
JUL2016	WH2132	WH2132	07/20/88	1526	5.07	1	1	84828	279106	1.00	72.94	-0.023	NG/GM
JUL2017	WH2133	WH2133	07/20/88	1538	4.88	976	1718	169508	526489	0.51	77.27	-0.011	NG/GM
JUL2018	WH2134	WH2134	07/20/88	1549	4.96	1	1	46420	143494	1.00	77.64	-0.023	NG/GM
JUL2019	WH2135	WH2135	07/20/88	1606	5.14	3138	3512	56206	187685	0.89	71.83	0.059	NG/GM
JUL2025	WH2137	WH2137	07/20/88	1716	5.22	2853	4146	65058	210937	0.69	73.99	0.053	NG/GM
JUL2026	WH2138	WH2138	07/20/88	1727	5.05	1	1	24449	77061	1.00	76.12	-0.023	NG/GM
JUL2027	WH2139	WH2139	07/20/88	1738	4.98	4017	3019	42281	131835	1.33	76.89	0.194	NG/GM
JUL2028	WH2143	WH2143	07/20/88	1753	5.14	1	1	62472	196018	1.00	75.72	-0.022	NG/GM
JUL2029	WH2144	WH2144	07/20/88	1803	5.02	1	1	41164	130302	1.00	82.12	-0.023	NG/GM
JUL2030	WH2146	WH2146	07/20/88	1815	5.22	1	1	9316	26532	1.00	75.22	-0.022	NG/GM
JUL2031	WH2149	WH2149	07/20/88	1826	5.17	4346	7490	110570	337584	0.58	74.38	0.054	NG/GM
JUL2032	WH2150	WH2150	07/20/88	1836	5.16	10898	13037	260365	797022	0.84	78.37	0.047	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: WEF
CASE: [illegible]
DATE: 07/2[illegible]/88

SYD SAMPLE #	EPA SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/21/88	1039	0.39*	82.31	0.300 U			NG/GM	
SOILBLANK	OCL34687	07/21/88	1050	0.15*	60.97	0.300 U			NG/GM	
SOILSPIKE	OCL33739	07/21/88	1100	1.07	94.57	0.832			NG/GM	
SOIL PE	PE-A	07/21/88	1111	1.08	80.21	0.801			NG/GM	
WH2151	WH2151	07/21/88	1121	2.40*	78.75	0.300 U			NG/GM	
WH2152A	WH2152A	07/21/88	1132	0.77*	81.18	0.300 U			NG/GM	
WH2153B	WH2153B	07/21/88	1144	1.00*	78.72	0.300 U			NG/GM	
WH2154C	WH2154C	07/21/88	1155	1.06	81.02	0.300 U			NG/GM	
WH2155D	WH2155D	07/21/88	1205	0.76*	82.59	0.300 U			NG/GM	
WH2156	WH2156	07/21/88	1215	0.81*	82.69	0.300 U			NG/GM	
WH2157	WH2157	07/21/88	1225	1.39*	80.78	0.300 U			NG/GM	
WH2158	WH2158	07/21/88	1235	1.26*	79.24	0.300 U			NG/GM	
WH2162	WH2162	07/21/88	1246	1.00*	82.30	0.300 U			NG/GM	
WH2163	WH2163	07/21/88	1256	1.00*	88.13	0.300 U			NG/GM	
WH2164	WH2164	07/21/88	1306	1.00*	83.43	0.300 U			NG/GM	
WH2166	WH2166	07/21/88	1316	1.00*	87.15	0.300 U			NG/GM	
WH2169	WH2169	07/21/88	1326	1.07	77.18	0.300 U			NG/GM	
WH2170	WH2170	07/21/88	1337	1.13	79.58	0.300 U			NG/GM	
WH2171	WH2171	07/21/88	1350	0.00*	80.64	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

[illegible] REPORT FORM

[illegible]
[illegible]
[illegible]

SURROGATE COMP [illegible] RF NATIVE [illegible] ISTD RATIO, LIMS TO [illegible]
INTERNAL STD COMP [illegible] RF SURROGATE [illegible] CONCENTRATION FACTOR: [illegible]

LAB SAMPLE #	SMO SAMPLE #	EPA SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 269	RATIO 257/259	SURR ACC	[illegible] VALUE	[illegible]
JUL2102	METHBLANK	METHBLNK	07/21/88	1039	5.00	520	1342	191799	559225	0.39	90.31	-0.015	NG/GM
JUL2103	SOILBLANK	OCL34687	07/21/88	1050	5.00	1063	6866	348592	1033198	0.15	80.97	-0.005	NG/GM
JUL2104	SOILSPIKE	OCL35739	07/21/88	1100	5.00	88466	82456	187335	473994	1.07	94.57	0.332	NG/GM
JUL2105	SOIL PE	PE-A	07/21/88	1111	5.00	66537	61570	123993	368866	1.08	90.21	0.201	NG/GM
JUL2106	WH2151	WH2151	07/21/88	1121	5.04	2818	1175	43933	133806	2.40	73.75	0.047	NG/GM
JUL2107	WH2152A	WH2152A	07/21/88	1132	4.97	2325	3016	67029	198098	0.77	91.19	0.041	NG/GM
JUL2108	WH2153B	WH2153B	07/21/88	1144	5.20	1	1	47386	144472	1.00	78.72	-0.022	NG/GM
JUL2109	WH2154C	WH2154C	07/21/88	1155	4.90	4909	4610	68542	262141	1.06	81.02	0.065	NG/GM
JUL2110	WH2155D	WH2155D	07/21/88	1205	5.22	1878	2467	49714	144399	0.76	82.59	0.046	NG/GM
JUL2111	WH2156	WH2156	07/21/88	1215	5.01	3014	3708	94585	274435	0.81	82.69	0.035	NG/GM
JUL2112	WH2157	WH2157	07/21/88	1225	4.96	3366	2425	41438	123006	1.39	80.78	0.089	NG/GM
JUL2113	WH2158	WH2158	07/21/88	1235	5.19	4012	3193	67628	265261	1.26	79.24	0.040	NG/GM
JUL2114	WH2162	WH2162	07/21/88	1246	5.05	1	1	78936	230187	1.00	82.30	-0.021	NG/GM
JUL2115	WH2163	WH2163	07/21/88	1256	4.93	1	1	40567	110469	1.00	88.13	-0.023	NG/GM
JUL2116	WH2164	WH2164	07/21/88	1306	4.90	1	1	38776	111544	1.00	87.43	-0.023	NG/GM
JUL2117	WH2166	WH2166	07/21/88	1316	5.10	1	1	17901	49296	1.00	87.15	-0.022	NG/GM
JUL2118	WH2169	WH2169	07/21/88	1326	5.20	11029	10337	113186	351604	1.07	77.18	0.117	NG/GM
JUL2119	WH2170	WH2170	07/21/88	1337	5.16	18727	16563	212534	640383	1.13	79.58	0.184	NG/GM
JUL2120	WH2171	WH2171	07/21/88	1350	1.00	9	5148	277707	826467	0.00	80.84	-0.040	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0720
DATE: 07/23/88

SMO SAMPLE #	EPA SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/21/88	1513	1.00*	88.42	0.300 U			NG/GM	
SOILBLANK	OCLZ4575	07/21/88	1524	1.00*	84.14	0.300 U			NG/GM	
SOILSPIKE	OCLZ5739	07/21/88	1534	1.10	88.52	0.804			NG/GM	
SOIL PE	FE-A	07/21/88	1545	1.06	80.87	0.808			NG/GM	
WH2034	WH2034	07/21/88	1556	1.11	81.05	2.153			NG/GM	
WH2035	WH2035	07/21/88	1607	1.10	79.65	1.986			NG/GM	
WH2036	WH2036	07/21/88	1618	1.09	81.66	1.864			NG/GM	
WH2042	WH2042	07/21/88	1629	1.14	82.38	0.693			NG/GM	
WH2043	WH2043	07/21/88	1641	1.03	81.28	1.445			NG/GM	
WH2044	WH2044	07/21/88	1652	1.08	82.98	0.738			NG/GM	
WH2083	WH2083	07/21/88	1703	1.09	79.08	2.792			NG/GM	
WH2084	WH2084	07/21/88	1715	1.13	79.68	1.637			NG/GM	
WH2085	WH2085	07/21/88	1725	1.09	93.33	1.343			NG/GM	
WH2089	WH2089	07/21/88	1737	1.11	82.53	1.253			NG/GM	
WH2090	WH2090	07/21/88	1747	1.08	84.26	1.089			NG/GM	
WH2091	WH2091	07/21/88	1758	1.07	82.75	1.265			NG/GM	
WH2097	WH2097	07/21/88	1821	1.12	79.66	0.896			NG/GM	
WH2098	WH2098	07/21/88	1933	1.12	82.11	0.906			NG/GM	
WH2173	WH2173	07/21/88	1944	1.05	81.81	0.300 U			NG/GM	
WH2177	WH2177	07/22/88	1025	1.01	85.00	0.300 U			NG/GM	
WH2178	WH2178	07/22/88	1036	1.01	81.16	0.300 U			NG/GM	
WH2179	WH2179	07/22/88	1047	0.92*	81.83	0.300 U			NG/GM	
WH2183	WH2183	07/22/88	1059	1.00*	82.42	0.300 U			NG/GM	
WH2154	WH2184	07/22/88	1111	0.79*	81.85	0.300 U			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

REFL CODES:
A AUTOMATIC REFL
[illegible] REQUESTED REFL

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0720
DATE: 07/23/88

SURROGATE CONC 0.1 | RF NATIVE 2.109 | ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.1 | RF SURROGATE 2.08 | CORRECTION FACTOR: 0.010

LAB SAMPLE #	SMS SAMPLE #	EPA SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL2121	METHBLANK	METHBLNK	07/21/88	1513	5.00	1	1	128735	349436	1.00	83.42	-0.023	NG/GM
JUL2122	SOILBLANK	OCL34575	07/21/88	1524	5.00	1	1	56668	141638	1.00	84.14	-0.023	NG/GM
JUL2123	SOILSPIKE	OCL35739	07/21/88	1534	5.00	92890	84319	188378	507993	1.10	86.52	0.804	NG/GM
JUL2124	SOIL PE	PE-A	07/21/88	1545	5.00	68533	65070	129436	381940	1.06	80.87	0.808	NG/GM
JUL2125	WH2034	WH2034	07/21/88	1556	5.01	194159	174293	137408	400666	1.11	81.05	2.153	NG/GM
JUL2126	WH2035	WH2035	07/21/88	1607	5.05	79863	72379	59927	177972	1.10	79.65	1.956	NG/GM
JUL2127	WH2036	WH2036	07/21/88	1618	5.07	77257	71157	63419	183943	1.09	81.66	1.864	NG/GM
JUL2128	WH2042	WH2042	07/21/88	1629	5.08	24220	21338	51279	148639	1.14	82.39	0.693	NG/GM
JUL2129	WH2043	WH2043	07/21/88	1641	5.01	14881	14395	16144	47193	1.03	81.28	1.445	NG/GM
JUL2130	WH2044	WH2044	07/21/88	1652	5.02	25221	23346	52423	150828	1.08	82.98	0.739	NG/GM
JUL2131	WH2083	WH2083	07/21/88	1703	5.16	239356	220159	130274	387503	1.09	79.03	2.702	NG/GM
JUL2132	WH2084	WH2084	07/21/88	1715	5.14	49319	43764	43483	129369	1.13	79.65	1.037	NG/GM
JUL2133	WH2085	WH2085	07/21/88	1725	5.14	64161	58640	72739	207507	1.09	80.33	1.343	NG/GM
JUL2134	WH2089	WH2089	07/21/88	1737	5.05	121459	109460	147474	425448	1.11	82.53	1.253	NG/GM
JUL2135	WH2090	WH2090	07/21/88	1747	5.04	68227	63343	99277	280661	1.08	84.26	1.080	NG/GM
JUL2136	WH2091	WH2091	07/21/88	1758	5.02	155217	145476	191851	551596	1.07	82.75	1.265	NG/GM
JUL2138	WH2097	WH2097	07/21/88	1821	5.10	59846	53559	95949	287140	1.12	79.66	0.896	NG/GM
JUL2139	WH2098	WH2098	07/21/88	1833	5.00	91905	82226	153136	444713	1.12	82.11	0.906	NG/GM
JUL2140	WH2173	WH2173	07/21/88	1844	5.08	24758	23633	211995	621100	1.05	81.81	0.159	NG/GM
JUL2202	WH2177	WH2177	07/22/88	1025	5.16	13603	13407	231765	654011	1.01	85.00	0.073	NG/GM
JUL2203	WH2178	WH2178	07/22/88	1036	5.09	5719	5664	169727	724281	1.01	81.16	0.059	NG/GM
JUL2204	WH2179	WH2179	07/22/88	1047	5.08	8466	9236	183671	556037	0.92	81.87	0.052	NG/GM
JUL2205	WH2180	WH2180	07/22/88	[illegible]	5.01	[illegible]	21174	[illegible]	1055244	1.00	82.42	[illegible]	NG/GM
JUL2206	WH2184	WH2184	07/22/88	[illegible]	[illegible]	10765	[illegible]	274398	604243	0.79	81.85	[illegible]	[illegible]

TANDEM MASS SPECTROMETRY

TMS ANALYTICAL SERVICES, INC.

6376 Monroe Trail
Indianapolis, Indiana 46268
317-291-5697

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: NSP
CASE: 6736
DATE: 08/11/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/25/88	0914	0.69*	87.26	0.300 U			NG/GM	
SOILBLANK	OCL34559	07/25/88	0929	0.80*	85.63	0.300 U			NG/GM	
SOILSPIKE	OCL33536	07/25/88	0940	1.36	93.17	0.849			NG/GM	
SOIL PE	PE-A	07/25/88	0950	1.07	84.29	0.839			NG/GM	
WH2185	WH2185	07/25/88	1003	1.09*	84.10	0.300 U			NG/GM	
WH2189	WH2189	07/25/88	1017	0.91*	92.35	0.300 U			NG/GM	
WH2190	WH2190	07/25/88	1030	0.89*	82.95	0.300 U			NG/GM	
WH2191	WH2191	07/25/88	1041	0.79*	83.90	0.300 U			NG/GM	
WH2193	WH2193	07/25/88	1053	0.96*	84.58	0.300 U			NG/GM	
WH2197	WH2197	07/25/88	1104	0.93*	85.16	0.300 U			NG/GM	
WH2198	WH2198	07/25/88	1115	0.89*	85.37	0.300 U			NG/GM	
WH2199	WH2199	07/25/88	1125	0.83*	84.95	0.300 U			NG/GM	
WH2203	WH2203	07/25/88	1135	0.07*	86.33	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2204	WH2204	07/25/88	1145	1.00*	86.56	0.300 U			NG/GM	
WH2205	WH2205	07/25/88	1155	0.29*	87.07	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/25% RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/DMS WORKSHEET REPORT FORM

SITE: HER
CASE: 0720
DATE: 08/01/88

SEPARATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.231
INTERNAL STD CONC 1.05 RF SURROGATE 2.053 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR REC	RAW VALUE	UNITS
JUL2502	METHBLANK	METHBLNK	07/25/88	0914	5.00	1354	2004	178637	491279	0.68	87.2±	-0.007	NG/GM
UL2503	SOILBLANK	OCL54559	07/25/88	0929	5.00	1526	1909	111666	312934	0.80	85.63	0.003	NG/GM
UL2504	SOILSPIKE	OCL35536	07/25/88	0946	5.00	139912	131452	287972	737942	1.06	92.17	0.549	NG/GM
JUL2505	SOIL PE	PE-A	07/25/88	0950	5.09	125857	120531	244918	693358	1.07	84.29	0.830	NG/GM
UL2506	WH2185	WH2185	07/25/88	1003	5.04	12283	12268	201105	573538	1.00	84.10	0.078	NG/GM
UL2507	WH2189	WH2189	07/25/88	1017	5.09	11378	12483	124994	364372	0.91	82.25	0.130	NG/GM
JUL2508	WH2190	WH2190	07/25/88	1030	5.13	14136	15957	253920	734207	0.89	82.95	0.072	NG/GM
UL2509	WH2191	WH2191	07/25/88	1041	5.17	11235	14144	219037	626210	0.79	83.90	0.071	NG/GM
UL2510	WH2193	WH2193	07/25/88	1053	5.02	13582	14121	146742	415962	0.96	84.59	0.134	NG/GM
JUL2511	WH2197	WH2197	07/25/88	1104	5.01	17555	18796	260404	789673	0.93	85.16	0.086	NG/GM
JUL2512	WH2196	WH2198	07/25/88	1115	5.01	9715	10968	266689	749418	0.89	85.37	0.042	NG/GM
UL2513	WH2199	WH2199	07/25/88	1125	5.15	11699	14032	231607	654003	0.83	84.95	0.068	NG/GM
JUL2514	WH2203	WH2203	07/25/88	1135	1.00	422	6094	380335	1057201	0.07	86.33	-0.041	NG/GM
JUL2515	WH2204	WH2204	07/25/88	1145	5.03	1	1	113588	307765	1.00	88.58	-0.023	NG/GM
UL2516	WH2205	WH2205	07/25/88	1155	1.00	841	2930	326336	899525	0.29	87.07	-0.065	NG/GM

TMS
TANDEM MASS SPECTROMETRY

TMS ANALYTICAL SERVICES, INC

6376 Morenci Trail
Indianapolis, Indiana 46268
317-291-5697

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: AEP
CASE: 0722
DATE: 08/01/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/26/88	1416	0.00*	71.40	0.300 U			NG/GM	
SOILBLANK	OCL34694	07/26/88	1427	0.13*	69.73	0.300 U			NG/GM	
SOILSPIKE	OCL35612	07/26/88	1438	1.19	79.44	0.808			NG/GM	
SOIL PE	PE-R	07/26/88	1449	1.18	69.66	0.752			NG/GM	
WH2099	WH2099	07/26/88	1500	1.09	69.45	0.710			NG/GM	
WH2206	WH2206	07/26/88	1510	1.15	70.99	1.890			NG/GM	
WH2207	WH2207	07/26/88	1522	1.00*	69.79	0.300 U			NG/GM	
WH2208	WH2208	07/26/88	1533	1.18	70.58	1.702			NG/GM	
WH2209	WH2209	07/26/88	1548	1.00*	70.81	0.300 U			NG/GM	
WH2210	WH2210	07/26/88	1559	0.27*	70.63	0.300 U			NG/GM	
WH2212	WH2212	07/26/88	1610	0.57*	71.04	0.300 U			NG/GM	
WH2213	WH2213	07/26/88	1622	1.00*	72.33	0.300 U			NG/GM	
WH2214	WH2214	07/26/88	1634	0.33*	71.36	0.300 U			NG/GM	
WH2215	WH2215	07/26/88	1645	1.19	71.73	0.300 U			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: NEP
CASE: 0722
DATE: 08/01/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

E MPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR REC	RAW VALUE	UNITS
UL2609	METHBLANK	METHBLNK	07/26/88	1416	5.00	154	6734	265515	892519	0.02	71.40	-0.005	NG/GM
IL2610	SOILBLANK	OCL34694	07/26/88	1427	5.00	926	6913	193509	665997	0.13	69.73	0.005	NG/GM
JUL2611	SOILSPIKE	OCL35612	07/26/88	1438	5.00	189599	160238	332613	998637	1.18	79.44	0.898	NG/GM
JUL2612	SOIL PE	PE-A	07/26/88	1449	5.00	113507	96467	187771	642724	1.18	69.66	0.752	NG/GM
JL2613	WH2099	WH2099	07/26/88	1500	5.22	49849	43847	86495	297033	1.09	69.45	0.710	NG/GM
JUL2614	WH2206	WH2206	07/26/88	1510	5.33	162897	141235	106463	353989	1.15	70.99	1.899	NG/GM
JUL2615	WH2207	WH2207	07/26/88	1522	5.22	1	1	85937	285192	1.00	69.79	-0.022	NG/GM
JUL2616	WH2208	WH2208	07/26/88	1533	5.06	234422	199024	175742	588954	1.18	70.58	1.702	NG/GM
JUL2617	WH2209	WH2209	07/26/88	1549	5.17	1	1	168200	570082	1.00	70.81	-0.022	NG/GM
JUL2618	WH2210	WH2210	07/26/88	1559	5.14	2625	9639	311801	1059333	0.27	70.63	0.004	NG/GM
UL2619	WH2212	WH2212	07/26/88	1610	5.54	4358	7630	320735	1083443	0.57	71.04	0.003	NG/GM
UL2620	WH2213	WH2213	07/26/88	1622	5.25	62454	62314	658388	2182360	1.00	72.33	0.107	NG/GM
JUL2621	WH2214	WH2214	07/26/88	1634	5.33	3008	9203	417041	1402529	0.33	71.36	-0.002	NG/GM
UL2622	WH2215	WH2215	07/26/88	1645	5.23	105664	96437	441986	1475111	1.10	71.73	0.289	NG/GM

TMS ANALYTICAL SERVICES, INC.
TANDEM MASS SPECTROMETRY
6575 Morenci Trail
Indianapolis, Indiana 46268
317-291-5697

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: MEF
CASE: 0726
DATE: 08/01/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	MWTHBLNK	07/27/88	1535	0.77*	67.25	0.300 U			NG/GM	
SOILBLANK	OCL34322	07/27/88	1553	0.78*	65.64	0.300 U			NG/GM	
SOILSPIKE	OCL35612	07/27/88	1603	1.17	77.56	0.820			NG/GM	
SOIL PE	PE-A	07/27/88	1614	1.21	66.64	0.746			NG/GM	
WH2220	WH2220	07/27/88	1625	1.05	68.84	0.300 U			NG/GM	
WH2221	WH2221	07/27/88	1657	1.16	69.57	2.705			NG/GM	
WH2224	WH2224	07/27/88	1707	1.19	71.27	0.710			NG/GM	
WH2226	WH2226	07/27/88	1720	1.17	70.88	2.336			NG/GM	
WH2227	WH2227	07/27/88	1730	0.43*	71.29	0.300 U			NG/GM	
WH2228	WH2228	07/27/88	1741	0.94*	70.72	0.300 U			NG/GM	
WH2229	WH2229	07/27/88	1751	0.81*	71.15	0.300 U			NG/GM	
WH2230	WH2230	07/27/88	1801	0.82*	72.60	0.300 U			NG/GM	
WH2232	WH2232	07/27/88	1812	0.47*	71.09	0.300 U			NG/GM	
WH2233	WH2233	07/27/88	1823	0.94*	72.06	0.300 U			NG/GM	
WH2234	WH2234	07/27/88	1833	0.75*	71.53	0.300 U			NG/GM	
WH2235	WH2235	07/27/88	1844	0.94*	71.29	0.300 U			NG/GM	
WH2236	WH2236	07/27/88	1855	0.41*	73.51	0.300 U			NG/GM	
WH2237	WH2237	07/27/88	1905	0.40*	74.69	0.300 U			NG/GM	
WH2238	WH2238	07/27/88	1917	0.37*	71.93	0.300 U			NG/GM	
WH2240	WH2240	07/27/88	2011	1.01	73.55	0.560			NG/GM	UNITS ARE NG/SAMPLE
WH2241	WH2241	07/27/88	1929	0.50*	72.63	0.300 U			NG/GM	
WH2242	WH2242	07/27/88	1950	0.00*	71.59	0.300 U			NG/GM	
WH2243	WH2243	07/27/88	2000	0.69*	72.06	0.300 U			NG/GM	
WH2222	WH2222	07/27/88	1646	1.16	69.57	2.840			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS [illegible] SHEET REPORT FORM

SITE: MER
CASE: 0726
DATE: 08/01/88

SURROGATE CONC 0.06 | RF NATIVE 2.109 | ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 | RF SURROGATE 2.033 | CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL2708	METHBLANK	MXTHBLNK	07/27/88	1535	5.00	2517	7694	336444	1200593	0.33	67.25	-0.003	NG/GM
JUL2709	SOILBLANK	DCL34322	07/27/88	1553	5.00	2570	8164	329847	1153258	0.32	68.64	-0.001	NG/GM
JUL2710	SOILSPIKE	DCL35612	07/27/88	1603	5.00	264452	242839	482637	1484029	1.17	77.56	0.820	NG/GM
JUL2711	SOIL PE	PE-A	07/27/88	1614	5.00	122783	101506	199367	652449	1.21	69.64	0.746	NG/GM
JUL2712	WH2220	WH2220	07/27/88	1625	5.06	54380	51987	362779	1252772	1.05	68.84	0.175	NG/GM
JUL2715	WH2221	WH2221	07/27/88	1657	5.26	374561	323032	171221	576692	1.16	69.57	2.705	NG/GM
JUL2716	WH2224	WH2224	07/27/88	1707	5.36	189484	159321	315142	1054365	1.19	71.27	0.710	NG/GM
JUL2717	WH2226	WH2226	07/27/88	1720	5.13	524021	446507	286506	950895	1.17	70.88	2.336	NG/GM
JUL2718	WH2227	WH2227	07/27/88	1730	5.40	6679	15531	272133	915874	0.43	71.29	0.032	NG/GM
JUL2719	WH2228	WH2228	07/27/88	1741	5.35	7371	8812	217742	738664	0.84	70.72	0.027	NG/GM
JUL2720	WH2229	WH2229	07/27/88	1751	5.26	5531	6815	197552	666133	0.81	71.15	0.020	NG/GM
JUL2721	WH2230	WH2230	07/27/88	1801	5.27	8372	10781	168925	558091	0.82	72.60	0.058	NG/GM
JUL2722	WH2232	WH2232	07/27/88	1812	5.39	2654	5677	189441	639441	0.47	71.09	0.007	NG/GM
JUL2723	WH2233	WH2233	07/27/88	1823	5.10	16763	17743	225995	752138	0.94	72.06	0.084	NG/GM
JUL2724	WH2234	WH2234	07/27/88	1833	5.16	3940	5258	137242	460332	0.75	71.53	0.024	NG/GM
JUL2725	WH2235	WH2235	07/27/88	1844	5.01	12213	12979	153566	515818	0.94	71.39	0.093	NG/GM
JUL2726	WH2236	WH2236	07/27/88	1855	5.15	1242	3020	81332	265506	0.41	73.51	0.015	NG/GM
JUL2727	WH2237	WH2237	07/27/88	1905	5.10	1872	4657	90097	239428	0.40	74.69	0.030	NG/GM
JUL2728	WH2238	WH2238	07/27/88	1917	5.03	1060	2852	140788	469727	0.37	71.93	-0.003	NG/GM
JUL2733	WH2240	WH2240	07/27/88	2011	1.00	13873	13693	144375	470640	1.01	73.55	0.550	NG/GM
JUL2729	WH2241	WH2241	07/27/88	1928	5.24	1827	3640	244766	808720	0.50	72.63	-0.007	NG/GM
JUL2731	WH2242	WH2242	07/27/88	1950	5.11	1	2848	116327	339972	0.00	71.59	-0.005	NG/GM
JUL2732	WH2243	WH2243	07/27/88	2000	5.10	301	3285	127084	423240	0.09	72.06	-0.003	NG/GM
JUL2714	WH2222	WH2222	07/27/88	1646	5.01	374561	323032	171221	576692	1.16	69.57	2.840	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 2240
DATE: 08/31/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/27/88	1535	0.33*	67.25	0.300 U			NG/GM	
SOILBLANK	OCL34322	07/27/88	1553	0.32*	68.64	0.300 U			NG/GM	
SOILSPIKE	OCL35612	07/27/88	1603	1.17	77.56	0.820			NG/GM	
SOIL PE	PE-A	07/27/88	1614	1.21	68.64	0.746			NG/GM	
WH2240	WH2240	08/24/88	1401	1.01	78.97	0.612			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 2240
DATE: 08/22/88

IPROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB MPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL2708	METHBLANK	METHBLNK	07/27/88	1535	5.00	2517	7694	336444	1200593	0.33	67.25	-0.003	NG/GM
UL2709	SOILBLANK	OCL34322	07/27/88	1553	5.00	2570	8164	329847	1153258	0.32	68.64	-0.001	NG/GM
UL2710	SOILSPIKE	OCL35612	07/27/88	1603	5.00	284452	242839	482637	1484029	1.17	77.56	0.820	NG/GM
JUL2711	SOIL PE	PE-A	07/27/88	1614	5.00	122783	101806	199367	692449	1.21	68.64	0.746	NG/GM
UG1809	WH2240	WH2240	08/24/88	1401	1.00	24750	24456	264564	803233	1.01	78.97	0.612	NG/GM

TMS
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TMS ANALYTICAL SERVICES, INC.

6376 Morenci Trail
Indianapolis, Indiana 46268
317-291-5697

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: MSR
CASE: 6726
DATE: 08/01/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE %RC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLAN	METHBLAN	07/28/88	1116	0.79*	78.5%	0.300 U			NG/GM	
SOILBLAN	OCLT455*	07/28/88	1127	0.15*	73.3%	0.200 U			NG/GM	
SOILSPIKE	OCLT55A3	07/28/88	1139	1.15	69.7%	0.600			NG/GM	
SOIL FE	FE-A	07/28/88	1149	1.10	71.7%	0.742			NG/GM	
W-2244	WH2244	07/28/88	1310	0.00*	75.0%	0.200 U			NG/GM	
W-2245	WH2245	07/28/88	1323	0.22*	70.6%	0.200 U			NG/GM	
W-2246	W-2246	07/28/88	1334	0.33*	69.0%	0.200 U			NG/GM	
W-2247	WH2247	07/28 88	1344	0.56*	66.7%	0.300 U			NG/GM	
WH2248	WH2248	07/28/88	1355	1.15	69.3%	0.723			NG/GM	
WH2250	WH2250	07/28/88	1415	1.17	66.4%	0.764			NG/GM	
W-2252	W-2252	07/28/88	1416	1.17	68.0%	0.629			NG/GM	
W-2256	W-2256	07/28/88	1427	0.57*	67.9%	0.200 U			NG/GM	UNITS OF NG PER SAMPLE
WH2257	WH2257	07/28/88	1437	1.2[illegible]	68.9%	1.74[illegible]			NG/GM	
W-2258	W-2258	07/28/88	1448	1.16	67.2%	1.476			NG/GM	
W-2259	W-2259	07/28/88	1458	1.17	69.0%	0.961			NG/GM	
W-2263	WH2263	07/28/88	1509	1.14	68.3%	0.47			NG/GM	
W-2264	W-2264	07/28/88	1519	1.12	69.0%	0.200 U			NG/GM	
W-2265	W-2265	07/28/88	1530	0.00*	69.7%	0.200 U			NG/GM	
W-2267	WH2267	07/28/88	1541	1.16	68.9%	0.200 U			NG/GM	
WH2271	W-2271	07/28/88	1551	1.15	69.6%	0.725			NG/GM	
WH2272	W-2272	07/28/88	1601	1.15	70.0%	0.695			NG/GM	
W-2273	W-2273	07/28 88	1612	1.15	69.2%	0.58*			NG/GM	
W-2277	W-2277	07/28/88	1622	1.11	71.8%	0.539			NG/GM	
WH2278	W-2278	07/28 88	1634	1.19	70.0%	0.716			NG/GM	

QUALIFICATION FLAGS:

* 2ST/2SP RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

SITE: [illegible]
CASE: 6726
DATE: 08/01/88

SURROGATE CONC 0.06 RF NATIVE [illegible] ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE [illegible] CORRECTION FACTOR: 0.010

RE SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR REC	RAW VALUE	UNITS
JUL2802	METHBLANK	METHBLNK	07/28/88	1116	5.00	2105	2681	199567	609632	0.79	78.56	-0.004	NG/GM
JUL2803	SOILBLANK	OCL34550	07/28/88	1127	5.00	461	2958	137727	446799	0.15	73.98	-0.005	NG/GM
JUL2804	SOILSPIKE	OCL35568	07/28/88	1138	5.00	91435	79570	166304	491218	1.15	80.77	0.803	NG/GM
JUL2805	SOIL PE	PE-A	07/28/88	1149	5.00	51020	46268	89460	301726	1.10	70.72	0.742	NG/GM
JUL2806	WH2244	WH2244	07/28/88	1311	5.20	1	3429	94750	302937	0.00	75.07	0.004	NG/GM
JUL2807	WH2245	WH2245	07/28/88	1322	5.16	472	2126	106770	351333	0.22	72.93	-0.005	NG/GM
JUL2808	WH2246	WH2246	07/28/88	1334	5.05	1987	6033	162626	573493	0.33	68.05	0.010	NG/GM
JUL2809	WH2247	WH2247	07/28/88	1344	5.10	1973	3395	115349	402758	0.58	68.72	0.009	NG/GM
JUL2810	WH2249	WH2249	07/28/88	1355	5.12	58156	50505	98251	337651	1.15	69.39	0.723	NG/GM
JUL2811	WH2250	WH2250	07/28/88	1405	5.04	82730	73130	125206	448905	1.13	66.46	0.774	NG/GM
JUL2812	WH2252	WH2252	07/28/88	1416	5.00	95469	81575	134447	470908	1.17	68.00	0.969	NG/GM
JUL2813	WH2256	WH2256	07/28/88	1427	1.00	2780	4868	221913	784110	0.57	67.91	0.001	NG/GM
JUL2814	WH2257	WH2257	07/28/88	1437	5.10	141014	117223	99311	340570	1.20	68.91	1.740	NG/GM
JUL2815	WH2258	WH2258	07/28/88	1448	5.06	117824	101550	97318	342874	1.16	67.23	1.476	NG/GM
JUL2816	WH2259	WH2259	07/28/88	1458	5.11	121602	107701	156805	540780	1.13	69.01	0.961	NG/GM
JUL2817	WH2263	WH2263	07/28/88	1508	5.15	82626	72327	232144	811764	1.14	68.37	0.417	NG/GM
JUL2818	WH2264	WH2264	07/28/88	1519	5.12	30740	27517	163128	565685	1.12	69.07	0.216	NG/GM
JUL2819	WH2266	WH2266	07/28/88	1530	5.05	1	1181	87698	303437	0.00	69.36	-0.014	NG/GM
JUL2820	WH2267	WH2267	07/28/88	1541	5.07	20609	18760	112397	390372	1.10	68.96	0.215	NG/GM
JUL2821	WH2271	WH2271	07/28/88	1551	5.13	107640	91071	177138	611586	1.18	69.06	0.729	NG/GM
JUL2822	WH2272	WH2272	07/28/88	1601	5.13	164189	137705	285663	972592	1.19	70.05	0.695	NG/GM
JUL2823	WH2273	WH2273	07/28/88	1612	5.10	90858	77005	186488	642998	1.18	69.24	0.554	NG/GM
JUL2824	WH2277	WH2277	07/28/88	1622	5.20	70978	63942	161953	548572	1.11	70.52	0.539	NG/GM
JUL2825	WH2278	WH2278	07/28/88	1634	5.01	97452	82097	173807	575421	1.19	72.05	0.716	NG/GM

TMS ANALYTICAL SERVICES, INC.

TANDEM MASS SPECTROMETRY

6576 Mo[illegible] Trail
Indianapolis, Indiana 46268
317-291-5697

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HEP
CASE: 6725
DATE: 08/01/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE REC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	07/29/88	1250	0.00*	83.32	0.300 U			NG/GM	
SOILBLANK	OCL34506	07/29/88	1304	0.41*	73.83	0.300 U			NG/GM	
SOILSPIKE	OCL35569	07/29/88	1315	1.21	79.40	0.779			NG/GM	
SOIL PE	PE-B	07/29/88	1328	1.19	70.01	3.550			NG/GM	
WH2280	WH2280	07/29/88	1342	0.29*	69.45	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2281	WH2281	07/29/88	1356	0.27*	69.55	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2282	WH2282	07/29/88	1408	1.11	66.78	0.575			NG/GM	

QUALIFICATION FLAGS:

- * 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
- ** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
- *** HIGH DETECTION LIMIT

RERUN CODES:

A AUTOMATIC RERUN

R REQUESTED RERUN

[illegible] SHEET REPORT FORM

SITE: HER
CASE: 0726
DATE: 08/01/86

SURROGATE CONC 0.95 — RF NATIVE [illegible] — ION RATIO: [illegible] TO [illegible]
INTERNAL STD CONC 1.05 — RF SURROGATE [illegible] — CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
JUL2902	METHBLANK	METHBLNK	07/29/86	1250	5.00	1	5413	317701	915132	0.00	63.32	-0.009	NG/GM
JUL2903	SOILBLANK	DCL34506	07/29/86	1304	5.00	2692	6479	242622	798753	0.41	73.38	0.005	NG/GM
JUL2904	SOILSPIKE	DCL35569	07/29/86	1315	5.00	94455	77816	169545	509400	1.21	75.40	0.779	NG/GM
JUL2905	SOIL PE	PE-B	07/29/86	1328	5.00	438172	366836	160547	534177	1.19	70.01	3.550	NG/GM
JUL2906	WH2280	WH2280	07/29/86	1342	1.00	2222	7992	335688	1159930	0.28	69.45	-0.010	NG/GM
JUL2907	WH2281	WH2281	07/29/86	1356	1.00	1342	4897	181852	627452	0.27	69.55	0.003	NG/GM
JUL2908	WH2282	WH2282	07/29/86	1408	5.24	28346	25628	57278	204757	1.11	66.78	0.575	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HEP
CASE: 6726
DATE: 08/10/88

AFR#	CLIENT SAMPLE #	ANALYSIS DATE	TIME	RATIO 320/328	RATIO 332/334	SURROGATE REC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLAN	08/01/88	2112	1.09+	0.79	72.02	0.300 U			NG/GM	
SOILBLANK	SOILBLNK	08/01/88	2146	1.09+	0.79	72.40	0.300 U			NG/GM	
SOILSPIKE	SOILSPKE	08/01/88	2219	0.78	0.79	80.56	0.818			NG/GM	
PE-A	PE-A	08/01/88	2257	0.75	0.79	71.34	0.765			NG/GM	
WH2060	WH2060	08/01/88	2326	0.77	0.79	72.11	0.975			NG/GM	
WH2061	WH2061	08/02/88	0004	0.65	0.75	51.20	1.627			NG/GM	
W-2108	WH2108	08/02/88	0034	0.77	0.80	73.12	0.385			NG/GM	
W-2109	WH2109	08/02/88	0107	0.76	0.78	75.29	0.424			NG/GM	
W-2110	WH2110	08/02/88	0141	0.75	0.80	72.34	0.430			NG/GM	
W-2126	WH2126	08/02/88	0214	0.75	0.80	71.75	3.871			NG/GM	
WH2127	WH2127	08/02/88	0248	0.77	0.80	70.78	2.094			NG/GM	
W-2128	WH2128	08/02/88	0321	0.76	0.79	72.23	3.139			NG/GM	
W-2287	WH2287	08/02/88	0425	0.76	0.79	71.92	0.300 U			NG/GM	
WH2289	WH2289	08/02/88	0501	0.85	0.80	71.13	0.300 U			NG/GM	
WH2305	WH2305	08/02/88	0536	0.78	0.79	75.10	3.077			NG/GM	
W-2306	WH2306	08/02/88	0609	0.79	0.79	71.65	0.948			NG/GM	
W-2307	W-2307	08/02/88	0643	0.77	0.80	71.34	2.503			NG/GM	

QUALIFICATION FLAGS:

\+ 320/328 OR 332/334 RATIO OUTSIDE OF ACCEPTABLE RANGE
++ SURROGATE OUTSIDE OF ACCEPTABLE RANGE
+++ HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

SPECIAL INSTRUCTIONS (IF ANY):

[illegible]

[illegible]

[illegible]

[illegible]

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	SAMPLE AMOUNT	ION 320	ION 322	ION 328	ION 332	ION 334	RATIO 320/322	RATIO 332/334	SURR REC	[illegible] VALUE	
4HERC03A	METHBLANK	METHBLNK	5.00	1	1	189179	434647	548437	1.00*	0.79	72.90	0.000	NG/GM
4HERC04A	SOILBLANK	SOILBLNK	5.00	1	1	122332	280007	352568	1.00*	0.79	72.40	0.000	NG/GM
4HERC05A	SOILSPIKE	SOILSPKE	5.00	44433	57233	123905	287544	311963	0.78	0.79	80.50	0.515	NG/GM
4HERC06A	PE-A	PE-A	5.00	50350	66734	128558	295546	375909	0.75	0.79	71.34	0.765	NG/GM
4HERC07A	WH2060	WH2060	5.06	91316	118079	184964	421735	532896	0.77	0.79	72.11	0.976	NG/GM
4HERC08A	WH2061	WH2061	5.07	6628	9785	9806	19213	25591	0.68	0.75	81.20	1.627	NG/GM
4HERC09A	WH2108	WH2108	5.04	15583	20228	81430	184631	231349	0.77	0.80	73.12	0.285	NG/GM
4HERC10A	WH2109	WH2109	5.21	17384	22741	80330	179743	229553	0.76	0.78	73.29	0.424	NG/GM
4HERC11A	WH2110	WH2110	5.04	29763	39818	142102	320491	403066	0.75	0.80	73.34	0.430	NG/GM
4HERC12A	WH2126	WH2126	5.20	85198	112977	43493	98460	123163	0.75	0.80	71.75	3.871	NG/GM
4HERC13A	WH2127	WH2127	5.07	110175	143793	103102	239274	299250	0.77	0.80	70.78	2.094	NG/GM
4HERC14A	WH2128	WH2128	5.00	169164	217412	108950	243872	310731	0.78	0.79	72.23	3.139	NG/GM
4HERC16A	WH2287	WH2287	5.06	8758	11503	141580	324317	412133	0.76	0.79	71.92	0.122	NG/GM
4HERC17A	WH2289	WH2289	5.03	9838	11029	62418	145378	182600	0.89	0.80	71.13	0.285	NG/GM
4HERC18A	WH2305	WH2305	5.04	70570	90729	47786	103635	130519	0.78	0.79	75.10	3.077	NG/GM
4HERC19A	WH2306	WH2306	5.19	64145	81540	128131	294204	371468	0.79	0.79	71.65	0.949	NG/GM
4HERC20A	WH2307	WH2307	5.03	114683	148568	91033	208452	262280	0.77	0.80	71.34	2.503	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: MER
CASE: 0803
DATE: 08/09/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	RATIO 320/322	RATIO 332/334	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	08/02/88	1054	1.00*	0.79	71.96	0.300 U			NG/GM	
SOILBLANK	SOILBLNK	08/02/88	1127	1.00*	0.79	73.99	0.300 U			NG/GM	
SOILSPIKE	SOILSPKE	08/02/88	1201	0.76	0.80	82.67	0.798			NG/GM	
PEA-2	PEA-2	08/02/88	1234	0.78	0.79	74.17	0.670			NG/GM	
WH2311	WH2311	08/02/88	0806	0.74	0.79	73.33	0.300 U			NG/GM	
WH2312	WH2312	08/02/88	0840	0.61*	0.80	76.06	0.300 U			NG/GM	
WH2313	WH2313	08/02/88	0913	0.70	0.81	71.97	0.519			NG/GM	
WH2314	WH2314	08/02/88	0947	0.76	0.77	76.44	2.849			NG/GM	
WH2316	WH2316	08/02/88	1020	0.77	0.80	71.39	2.814			NG/GM	
WH2317	WH2317	08/02/88	1308	0.76	0.80	72.81	2.875			NG/GM	
WH2318	WH2318	08/02/88	1342	0.79	0.80	74.79	3.183			NG/GM	
WH2319	WH2319	08/02/88	1415	1.00*	0.79	70.23	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2320	WH2320	08/02/88	1609	1.00*	0.81	71.22	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2063	WH2063	08/02/88	1522	0.81	0.77	72.99	1.004			NG/GM	

QUALIFICATION FLAGS:

* 320/322 OR 332/334 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

SPECIAL INSTRUCTIONS (IF ANY):

LR/GC/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0803
DATE: 08/09/88

SURROGATE CONC 0.06 RRF NATIVE 1.110
INTERNAL STD CONC 1.05 RRF SURROGATE 1.336

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	SAMPLE AMOUNT	ION 320	ION 322	ION 328	ION 332	ION 334	RATIO 320/322	RATIO 332/334	SURR ACC	RAW VALUE	
4HERF26A	METHBLANK	METHBLNK	5.00	1	1	159695	365506	465351	1.00*	0.79	71.96	0.000	NG/GM
4HERF27A	SOILBLANK	SOILBLNK	5.00	1	1	83438	186820	235363	1.00*	0.79	73.99	0.000	NG/GM
4HERF28A	SOILSPIKE	SOILSPKE	5.00	46391	60980	134337	268463	337430	0.76	0.80	82.67	0.798	NG/GM
4HERF29A	PEA-2	PEA-2	5.00	33333	42749	101636	225270	285829	0.78	0.79	74.17	0.670	NG/GM
4HERF21A	WH2311	WH2311	5.07	12739	17131	114987	257797	328453	0.74	0.79	73.33	0.226	NG/GM
4HERF22A	WH2312	WH2312	5.15	6824	11233	57509	125113	157471	0.61*	0.80	76.06	0.279	NG/GM
4HERF23A	WH2313	WH2313	5.03	20801	29847	84270	194982	241966	0.70	0.81	71.97	0.519	NG/GM
4HERF24A	WH2314	WH2314	5.18	78372	102959	57408	120279	156344	0.76	0.77	76.44	2.849	NG/GM
4HERF25A	WH2316	WH2316	5.08	117534	152641	82522	189149	236416	0.77	0.80	71.39	2.814	NG/GM
2HERF30A	WH2317	WH2317	5.15	219649	287752	152631	342208	429255	0.76	0.80	72.81	2.875	NG/GM
4HERF31A	WH2318	WH2318	5.05	139560	177401	90291	197825	246168	0.79	0.80	74.79	3.183	NG/GM
4HERF32A	WH2319	WH2319	1.00	1	1	202797	477660	603333	1.00*	0.79	70.23	0.000	NG/GM
5HERA01A	WH2320	WH2320	1.00	1	1	117866	277020	342550	1.00*	0.81	71.22	0.000	NG/GM
4HERF34A	WH2063	WH2063	5.07	77470	96079	150473	334432	432881	0.81	0.77	72.99	1.004	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: WER
CASE: 0802
DATE: 08/08/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	RATIO 320/322	RATIO 332/334	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	08/03/88	1851	1.00*	0.80	71.28	0.300 U			NG/GM	
SOILBLANK	SOILBLNK	08/03/88	1925	1.00*	0.80	72.07	0.300 U			NG/GM	
SOILSPIKE	SOILSPKE	08/03/88	1959	0.79	0.80	81.93	0.821			NG/GM	
PE-B	PE -B	08/03/88	2033	0.79	0.81	70.03	3.630			NG/GM	
WH2260	WH2260	08/03/88	2107	0.76	0.79	72.28	0.867			NG/GM	
WH2261	WH2261	08/03/88	2141	0.76	0.79	70.23	1.476			NG/GM	
WH2262	WH2262	08/03/88	2215	0.81	0.79	70.51	1.255			NG/GM	

QUALIFICATION FLAGS:

* 320/322 OR 332/334 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

SPECIAL INSTRUCTIONS (IF ANY):

LR/GC/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0802
DATE: 08/08/88

SURROGATE CONC 0.06 RRF NATIVE 1.110
INTERNAL STD CONC 1.05 RRF SURROGATE 1.336

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	SAMPLE AMOUNT	ION 320	ION 322	ION 328	ION 332	ION 334	RATIO 320/322	RATIO 332/334	SURR ACC	RAW VALUE	
0803C04A	METHBLANK	METHBLNK	5.00	1	1	120424	281155	351348	1.00*	0.80	71.28	0.000	NG/GM
0803C05A	SOILBLANK	SOILBLNK	5.00	1	1	119050	275187	343236	1.00*	0.80	72.07	0.000	NG/GM
0803C06A	SOILSPIKE	SOILSPKE	5.00	73184	92597	199828	405225	504122	0.79	0.80	81.93	0.821	NG/GM
0803C07A	PE-B	PE -B	5.00	220066	280492	118653	277326	343514	0.79	0.81	70.03	3.630	NG/GM
0803C08A	WH2260	WH2260	4.98	41051	54016	96237	219336	276601	0.76	0.79	72.28	0.867	NG/GM
0803C09A	WH2261	WH2261	5.00	65240	86225	87456	204175	257902	0.76	0.79	70.23	1.476	NG/GM
0803C10A	WH2262	WH2262	5.03	79544	98401	120430	280847	353970	0.81	0.79	70.51	1.255	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0805
DATE: 08/07/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	08/08/88	1454	1.00#	68.75	0.300 U			NG/GM	
SOILBLANK	OCL34506	08/08/88	1506	0.59#	66.98	0.300 U			NG/GM	
SOILSPIKE	OCL35539	08/08/88	1517	1.17	77.70	0.804			NG/GM	
SOIL PE	PE-A	08/08/88	1528	1.17	66.45	0.711			NG/GM	
WH2293	WH2293	08/08/88	1538	1.16	62.84	0.387			NG/GM	
WH2294	WH2294	08/08/88	1548	1.17	63.74	0.300 U			NG/GM	
WH2295	WH2295	08/08/88	1601	1.11	66.15	0.300 U			NG/GM	
WH2308	WH2308	08/08/88	1611	1.19	63.45	0.603			NG/GM	
WH2309	WH2309	08/08/88	1622	1.07	64.11	0.300 U			NG/GM	
WH2310	WH2310	08/08/88	1634	1.22	65.02	0.894			NG/GM	
WH1423	WH1423	08/08/88	1646	0.19#	66.65	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0805
DATE: 08/07/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
AUG0812	METHBLANK	METHBLNK	08/08/88	1454	5.00	1	1	103217	360345	1.00	68.75	-0.023	NG/GM
AUG0813	SOILBLANK	OCL34506	08/08/88	1506	5.00	7380	12445	304305	1090034	0.59	66.98	0.020	NG/GM
AUG0814	SOILSPIKE	OCL35539	08/08/88	1517	5.00	173952	148698	301323	924956	1.17	77.70	0.804	NG/GM
AUG0815	SOIL PE	PE-A	08/08/88	1528	5.00	120924	103202	201746	723967	1.17	66.45	0.711	NG/GM
AUG0816	WH2293	WH2293	08/08/88	1538	5.01	76094	65813	215423	819656	1.16	62.84	0.387	NG/GM
AUG0817	WH2294	WH2294	08/08/88	1548	5.03	51984	44618	189415	711095	1.17	63.74	0.297	NG/GM
AUG0818	WH2295	WH2295	08/08/88	1601	5.10	71095	63850	345295	1250074	1.11	66.15	0.229	NG/GM
AUG0819	WH2308	WH2308	08/08/88	1611	5.07	103480	87260	189473	712503	1.19	63.45	0.603	NG/GM
AUG0820	WH2309	WH2309	08/08/88	1622	5.09	48662	45372	188219	702602	1.07	64.11	0.289	NG/GM
AUG0821	WH2310	WH2310	08/08/88	1634	5.09	69457	56817	87734	321062	1.22	65.02	0.894	NG/GM
AUG0822	WH1423	WH1423	08/08/88	1646	1.00	1395	7388	324936	1169996	0.19	66.65	-0.025	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0811
DATE: 08/10/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	ANALYSIS TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	08/11/88	1613	1.00*	87.82	0.300 U			NG/GM	
SOILBLANK	OCL34504	08/11/88	1628	0.65*	80.93	0.300 U			NG/GM	
SOILSPIKE	OCL35562	08/11/88	1642	1.13	89.52	0.788			NG/GM	
SOIL PE	PE-A	08/11/88	1653	1.15	77.50	0.741			NG/GM	
WH2321	WH2321	08/11/88	1705	1.15	73.82	1.775			NG/GM	
WH2322	WH2322	08/11/88	1716	1.16	75.84	3.682			NG/GM	
WH2324	WH2324	08/11/88	1727	1.18	77.38	2.388			NG/GM	
WH2325	WH2325	08/11/88	1738	1.17	70.93	2.654			NG/GM	
WH2326	WH2326	08/11/88	1749	1.18	71.47	10.427			NG/GM	
WH2327	WH2327	08/11/88	1759	1.17	70.86	5.985			NG/GM	
WH2328	WH2328	08/11/88	1809	1.17	73.10	11.397			NG/GM	
WH2329	WH2329	08/11/88	1820	1.16	69.91	3.465			NG/GM	
WH2330	WH2330	08/11/88	1832	1.18	76.73	3.232			NG/GM	
WH2332	WH2332	08/11/88	1843	1.16	67.29	2.863			NG/GM	
WH2333	WH2333	08/11/88	1853	1.18	71.25	4.997			NG/GM	
WH2334	WH2334	08/11/88	1904	1.05	71.70	0.335			NG/GM	
WH2336	WH2336	08/11/88	1915	1.09	73.25	0.334			NG/GM	
WH2337	WH2337	08/11/88	1926	1.13	74.95	0.372			NG/GM	
WH2338	WH2338	08/11/88	1937	0.02*	74.20	0.300 U			NG/GM	UNITS OF NG PER SAMPLE
WH2339	WH2339	08/11/88	1948	0.00*	72.52	0.300 U			NG/GM	UNITS OF NG PER SAMPLE

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0811
DATE: 08/10/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
AU61104	METHBLANK	METHBLNK	08/11/88	1613	5.00	1	1	146790	401149	1.00	87.82	-0.023	MG/GM
AU61105	SOILBLANK	OCL34504	08/11/88	1628	5.00	2121	3284	159641	473367	0.65	80.93	0.004	MG/GM
AU61106	SOILSPIKE	OCL35562	08/11/88	1642	5.00	101159	89736	209427	558512	1.13	89.32	0.788	MG/GM
AU61107	SOIL PE	PE-A	08/11/88	1653	5.00	97360	84626	183421	564729	1.15	77.50	0.741	MG/GM
AU61108	WH2321	WH2321	08/11/88	1705	4.98	157465	136549	121461	389381	1.15	73.82	1.775	MG/GM
AU61109	WH2322	WH2322	08/11/88	1716	5.14	516726	447097	195236	600205	1.16	75.84	3.682	MG/GM
AU61110	WH2324	WH2324	08/11/88	1727	4.96	132811	112147	79744	242881	1.18	77.38	2.388	MG/GM
AU61111	WH2325	WH2325	08/11/88	1738	4.92	600117	512077	302346	1001152	1.17	70.93	2.654	MG/GM
AU61112	WH2326	WH2326	08/11/88	1749	4.94	2717394	2311133	373213	1154760	1.18	71.47	10.427	MG/GM
AU61113	WH2327	WH2327	08/11/88	1759	4.89	1836783	1565514	425186	1372819	1.17	70.86	5.985	MG/GM
AU61114	WH2328	WH2328	08/11/88	1809	5.01	2588727	2211335	330880	994600	1.17	73.10	11.397	MG/GM
AU61115	WH2329	WH2329	08/11/88	1820	5.02	593095	511369	224238	747846	1.16	69.91	3.465	MG/GM
AU61116	WH2330	WH2330	08/11/88	1832	4.94	423782	358993	189087	577128	1.18	76.73	3.232	MG/GM
AU61117	WH2332	WH2332	08/11/88	1843	5.10	567191	488020	244475	850131	1.16	67.29	2.863	MG/GM
AU61118	WH2333	WH2333	08/11/88	1853	4.99	1816872	1541033	491420	1589143	1.18	71.25	4.997	MG/GM
AU61119	WH2334	WH2334	08/11/88	1904	5.05	83690	79671	320874	1070960	1.05	71.70	0.335	MG/GM
AU61120	WH2336	WH2336	08/11/88	1915	4.97	57724	53025	226257	739314	1.09	73.25	0.334	MG/GM
AU61121	WH2337	WH2337	08/11/88	1926	5.06	36442	32140	127483	406941	1.13	74.95	0.372	MG/GM
AU61122	WH2338	WH2338	08/11/88	1937	1.00	89	4026	161263	521622	0.02	74.20	-0.021	MG/GM
AU61123	WH2339	WH2339	08/11/88	1948	1.00	1	4846	150611	498443	0.00	72.52	0.001	MG/GM

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0815
DATE: 08/17/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
AUG1637	METHBLANK	METHBLNK	08/16/88	1829	5.00	6005	12406	300051	983839	0.48	73.18	0.021	NG/GM
AUG1638	SOILBLANK	OCL34575	08/16/88	1841	5.00	7107	9229	278863	922829	0.77	72.50	0.019	NG/GM
AUG1639	SOILSPIKE	OCL35562	08/16/88	1853	5.00	278664	240842	518006	1455951	1.16	84.89	0.823	NG/GM
AUG1640	SOIL PE	PE-A	08/16/88	1904	5.00	152168	131215	252739	835892	1.16	72.09	0.781	NG/GM
AUG1641	WH2372	WH2372	08/16/88	1916	5.07	49050	46610	303555	1010936	1.05	71.94	0.199	NG/GM
AUG1642	WH2373	WH2373	08/16/88	1930	5.12	59283	53903	305338	1009433	1.10	72.44	0.237	NG/GM
AUG1643	WH2374	WH2374	08/16/88	1942	5.11	64943	59624	280627	940090	1.09	71.46	0.285	NG/GM
AUG1644	WH2375	WH2375	08/16/88	1953	5.11	324859	280430	329565	1113455	1.16	70.28	1.239	NG/GM
AUG1645	WH2376	WH2376	08/16/88	2005	5.09	309928	264067	307437	1030682	1.17	70.81	1.275	NG/GM
AUG1646	WH2377	WH2377	08/16/88	2016	5.07	370771	317231	358786	1186207	1.17	71.78	1.334	NG/GM
AUG1647	WH2378	WH2378	08/16/88	2027	5.03	229936	203603	349517	1172216	1.13	71.05	0.849	NG/GM
AUG1648	WH2379	WH2379	08/16/88	2038	5.10	244769	213496	352038	1167032	1.15	71.85	0.890	NG/GM
AUG1649	WH2380	WH2380	08/16/88	2049	5.02	182992	156015	241547	814686	1.17	70.58	0.960	NG/GM
AUG1650	WH2381	WH2381	08/16/88	2100	1.00	6019	9671	364795	1216994	0.62	71.93	0.038	NG/GM
AUG1651	WH2382	WH2382	08/16/88	2111	1.00	3089	11308	460953	1533205	0.27	72.15	-0.003	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0819
DATE: 08/21/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
WH2286	WH2286	08/18/88	1428	1.12	77.23	1.621			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: MER
CASE: 0819
DATE: 08/21/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
AUG1811	WH2286	WH2286	08/18/88	1428	5.08	15238	13658	13371	41041	1.12	77.23	1.621	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HER
CASE: 0822
DATE: 08/21/88

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	08/22/88	1410	0.00*	76.97	0.300 U			NG/GM	
SOILBLANK	OCL34541	08/22/88	1423	0.12*	75.71	0.300 U			NG/GM	
SOILSPIKE	OCL35548	08/22/88	1443	1.13	84.59	0.808			NG/GM	
SOIL PE	PE-A	08/22/88	1455	1.18	73.31	0.761			NG/GM	
WH2290	WH2290	08/22/88	1508	0.92*	73.31	0.300 U			NG/GM	
WH2291	WH2291	08/22/88	1519	1.00*	73.91	0.300 U			NG/GM	
WH2292	WH2292	08/22/88	1532	0.93*	73.63	0.300 U			NG/GM	

QUALIFICATION FLAGS:

* 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
** SURROGATE OUTSIDE OF ACCEPTABLE RANGE
*** HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0822
DATE: 08/21/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
AUG2206	METHBLANK	METHBLANK	08/22/88	1410	5.00	1	2216	107562	335373	0.00	76.97	-0.007	NG/GM
AUG2207	SOILBLANK	OCL34541	08/22/88	1423	5.00	608	4879	162135	513943	0.12	75.71	0.002	NG/GM
AUG2208	SOILSPIKE	OCL35548	08/22/88	1443	5.00	101053	89263	192526	543148	1.13	84.59	0.808	NG/GM
AUG2209	SOIL PE	PE-A	08/22/88	1455	5.00	156255	132734	268813	874467	1.18	73.31	0.761	NG/GM
AUG2210	WH2290	WH2290	08/22/88	1508	5.03	14911	16129	197611	646436	0.92	73.31	0.090	NG/GM
AUG2211	WH2291	WH2291	08/22/88	1519	5.09	18339	18327	218468	708744	1.00	73.91	0.098	NG/GM
AUG2212	WH2292	WH2292	08/22/88	1532	5.07	40206	43304	438085	1426466	0.93	73.63	0.114	NG/GM

TCDD FINAL DATA REPORT SHEET

FILE RECEIVED DATE:
FILE RECEIVED TIME:

SITE: HEP
CASE: 0869
DATE: 09/09/89

AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	NATIVE RATIO	SURROGATE ACC	TCDD CONC.	RERUN CODE	VALID CODE	UNITS	COMMENTS
METHBLANK	METHBLNK	09/09/88	1513	0.92#	76.96	0.300 U			NG/GM	
SOILBLANK	OCL34541	09/09/88	1527	0.76#	77.71	0.300 U			NG/GM	
SOILSPIKE	OCL35528	09/09/88	1540	1.11	84.44	0.845			NG/GM	
SOIL PE	PE-A	09/09/88	1552	1.10	77.11	0.768			NG/GM	
WH2383	WH2383	09/09/88	1606	0.95#	77.93	0.300 U			NG/GM	

QUALIFICATION FLAGS:

\# 257/259 RATIO OUTSIDE OF ACCEPTABLE RANGE
SURROGATE OUTSIDE OF ACCEPTABLE RANGE
HIGH DETECTION LIMIT

RERUN CODES:
A AUTOMATIC RERUN
R REQUESTED RERUN

GC/MS/MS WORKSHEET REPORT FORM

SITE: HER
CASE: 0909
DATE: 09/09/88

SURROGATE CONC 0.06 RF NATIVE 2.109 ION RATIO: 1.009 TO 1.233
INTERNAL STD CONC 1.05 RF SURROGATE 2.083 CORRECTION FACTOR: 0.010

LAB SAMPLE #	AREA #	CLIENT SAMPLE #	ANALYSIS DATE	TIME	SAMPLE AMOUNT	ION 257	ION 259	ION 263	ION 268	RATIO 257/259	SURR ACC	RAW VALUE	UNITS
SEP0903	METHBLANK	METHBLNK	09/09/88	1513	5.00	28740	31370	279565	870873	0.92	76.96	0.141	NG/GM
SEP0904	SOILBLANK	OCL34541	09/09/88	1527	5.00	7372	9680	203058	626863	0.76	77.71	0.042	NG/GM
SEP0905	SOILSPIKE	OCL33528	09/09/88	1540	5.00	122969	111076	226190	639151	1.11	84.44	0.845	NG/GM
SEP0906	SOIL PE	PE-A	09/09/88	1552	5.00	50776	46004	93768	290125	1.10	77.11	0.768	NG/GM
SEP0907	WH2383	WH2383	09/09/88	1606	5.02	5670	5986	104564	321822	0.95	77.93	0.063	NG/GM

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APPENDIX
C

APPENDIX C

SUMMARY DATA REPORT FORMS

2,3,7,8-TCDD

The following report forms for 2,3,7,8-TCDD analyses are extracted from analytical reports prepared by TMS Analytical Services, Inc. See Tables A-1 and A-2 (Appendix A) for identification and description of samples. The complete reports of these analyses are located in Volume IV.

HERO720A-2

FORM 8-15 TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 7/31/89

CASE:BATCH HERCULES 07208 - 2,3,7,8-TCDD Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/Kg Meas.	TCDD MFC	GC/MS Date	Analysis Time
WH2034	7/20/88	5.01	2.02	N/A	7/30/88	2126
WH2035	7/20/88	5.05	1.93	N/A	7/30/88	2157
WH2036	7/20/88	5.07	1.90	N/A	7/30/88	2231
WH2043	7/20/88	5.01	1.55	N/A	7/30/88	2304
WH2083	7/20/88	5.16	2.74	N/A	7/30/88	2338
WH2094	7/20/88	5.14	1.51	N/A	7/31/88	0011
WH2095	7/20/88	5.14	1.24	N/A	7/31/88	0045
WH2099	7/20/88	5.05	1.20	N/A	7/31/88	0119
WH2090	7/20/88	5.04	1.11	N/A	7/31/88	0152
WH2091	7/20/88	5.02	1.21	N/A	7/31/88	0225

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	.U = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: EMS ANALYTICAL SERVICES Report Date: 7/30/98

CASE:BATCH HERCULES 07204 - 2,3,7,8-TCDD Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/2341S		Response (Area) 259	320	322	328	3321S	3341S
WH2034	0.75	0.80		25813	66782	89604	71643	155327	123016
WH2035	0.77	0.75		15755	42724	55574	48342	104624	139850
WH2036	0.79	0.77		12319	33310	42297	36014	77039	99167
WH2042	0.78	0.74		5856	16776	21578	22174	47197	63855
WH2083	0.76	0.80		11614	33669	32817	18429	41352	51918
WH2054	0.73	0.77		5960	12345	21062	22422	44031	59752
WH2085	0.84	0.78		6618	21995	26178	34226	74150	95523
WH2039	0.77	0.80		21500	61075	79186	108603	231230	299532
WH2090	0.84	0.82		10997	28437	33098	43401	92271	113407
WH2091	0.80	0.76		10762	28035	34869	44872	100291	132486

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HEK0417

FORM 3-19 TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/89

CASE: Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2122	07/19/88	5.19	6.12	N/A	8/3/89	0302
WH2123	07/19/88	4.84	1.31	N/A	8/3/89	0336
WH2124	07/19/88	4.89	1.83	N/A	8/3/89	0410
WH2125	07/19/88	4.94	2.78	N/A	8/3/89	0444

MB	MB =	Method Blank	FB =	Field Blank
N	N =	Native TCDD Spike	IS =	Internal Standard
D	D =	Duplicate/Fortified Field Blank	SR =	Serum
PE	PE =	EMSL-LV Performance Evaluation Sample	ND =	Not Detected
MPC	MPC =	Maximum Possible Concentration	RS =	Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/19/99

CASE:

Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/3341S	Response (Area) 259	320	322	323	3321S	3341S
WH2122	0.77	0.79	48457	132173	172667	41981	95276	120905
WH2123	0.75	0.79	17594	26563	35503	43603	97055	122579
WH2124	0.90	0.90	2871	3545	3947	3622	8893	9926
WH2125	0.81	0.75	8874	25695	32925	20794	41921	55783

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HERO715-03

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/18/88

CASE: Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2089	7/15/88	5.13	3.43	N/A	8/3/88	0517
WH2091	7/15/88	5.07	4.18	N/A	8/3/88	0551
WH2092	7/15/88	5.03	3.59	N/A	8/3/88	0625
WH2096	7/15/88	5.10	2.27	N/A	8/3/88	0659
WH2087	7/15/88	5.01	1.87	N/A	8/3/88	0733
WH2088	7/15/88	5.02	2.39	N/A	8/3/88	0807
WH2092	7/15/88	5.13	1.56	N/A	8/3/88	0841
WH2093	7/15/88	5.04	1.41	N/A	8/3/88	0914
WH2094	7/15/88	5.07	1.00	N/A	8/3/88	0948

MB	MS =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

FORM 8-18 TCDD SOIL DATA REPORT FORM Page 2 of 2

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/15/88

CASE:

Column: SP2331; 60M x .25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2080	0.78	0.77	27485	84860	107312	46294	109169	139992
WH2081	0.78	0.81	35228	102659	132260	49224	111468	137943
WH2082	0.76	0.78	30499	92212	121054	50133	117037	149190
WH2086	0.75	0.80	50702	116343	154571	99789	235271	292512
WH2087	0.72	0.78	16540	44415	62036	48494	112651	143827
WH2088	0.79	0.79	24256	70913	89404	54478	133243	167232
WH2092	0.71	0.79	13516	28461	39918	36939	79953	100800
WH2093	0.76	0.79	16028	45092	59004	63276	146211	184279
WH2094	0.84	0.82	8810	27591	32766	50419	121438	147477

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HERO7120, 41 C7-06B-03

FORM B-1B TCDD SOIL DATA REPORT FORM

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/19/88

CASE:HEP0712B ISOMER SPECIFIC

Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2023	08/10/88	5.06	2.01	N/A	08/18/88	2107
WH2025	08/10/88	5.02	2.88	N/A	08/18/88	2140
WH2026	08/10/88	5.00	2.36	N/A	08/18/88	2213
WH2029	08/10/88	5.04	1.01	N/A	08/18/88	2319

MB MB = Method Blank
N N = Native TCDD Spike
D D = Duplicate/Fortified Field Blank
PE PE = EMSL-LV Performance Evaluation Sample
MPC MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES   Report Date: 08/19/88

CASE:HE507125 ISOMER SPECIFIC   Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2022	0.82	0.78		22402	27347	21111	49222	62079
WH2023	0.69	0.83	14332	43262	62463	35912	74612	89752
WH2026	0.71	0.75	24333	68795	97179	111108	133862	177699
WH2029	0.80	0.73	14675	24345	30563	54940	106349	136945

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration
FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HE07120-03

EPA 8-15 TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/88

CASE:HEP07120 ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2031	08/10/88	5.04	2.73	N/A	08/18/88	2353
WH2032	07/12/88	4.82	2.67	N/A	08/19/88	0026
WH2033	07/12/88	4.93	2.53	N/A	08/19/88	0059
WH2037	07/12/88	4.94	1.26	N/A	08/19/88	0132
WH2038	07/12/88	5.00	1.81	N/A	08/19/88	0205
WH2039	07/12/88	4.86	1.33	N/A	08/19/88	0238
WH2040	07/12/88	5.16	1.65	N/A	08/19/88	0312

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/88

CASE:HER0712C ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2031	0.81	0.82	18237	56768	70068	47594	93478	114407
WH2032	0.79	0.84	43708	164015	207312	126777	296269	353202
WH2033	0.76	0.85	20371	56132	74100	50872	108547	126515
WH2037	0.71	0.84	19213	47271	66579	38465	187769	222919
WH2038	0.74	0.78	39931	109606	147783	135862	281492	358637
WH2039	0.74	0.79		65446	88056	114791	234857	299055
WH2040	0.79	0.77		117355	148472	133285	273478	354366

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration
FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HER0714A-03

FORM 8-13 TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: THE ANALYTICAL SERVICES Report Date: 08/19/88

CASE:HER07144 ISOMER SPECIFIC Column: SP8031; 60M X .25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2057C	07/14/88	5.88	1.18	N/A	08/19/88	0346
WH2058D	07/14/88	4.89	1.23	N/A	08/19/88	0419
WH2059	07/14/88	5.11	0.95	N/A	08/19/88	0453

MB	MB =	Method Blank		FB =	Field Blank
N	N =	Native TCDD Spike		IS =	Internal Standard
D	D =	Duplicate/Fortified Field Blank		RR =	Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample		ND =	Not Detected
MPC	MPC =	Maximum Possible Concentration		RS =	Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/88

CASE:HERC0714A ISOMER SPECIFIC Column: SP2331; 60M * 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/3341S	Response (Area) 259	320	322	328	3321S	3341S
WH2057C	0.81	0.76	74771	141842	175391	245145	542933	698788
WH2058D	0.79	0.81	67755	180717	229685	298939	688159	859179
WH2059	0.80	0.80	56269	123522	153583	205864	572676	717210

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration
FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/98

CASE: HER9720A ISOMER SPECIFIC Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
W42042	07/20/98	5.08	0.65	N/A	08/19/98	0526

MB	MB =	Method Blank	FB =	Field Blank
N	N =	Native TCDD Spike	IS =	Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR =	Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND =	Not Detected
MPC	MPC =	Maximum Possible Concentration	RS =	Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/88

CASE: HEF07E0A ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/3341S	Response (Area) 259	320	322	328	332IS	3341S
WH2042	0.80	0.80	85703	74042	92909	88798	506538	635922

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration
FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/19/88

CASE: WEP0726A ISOMER SPECIFIC

Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time	
WH2221	07/26/88	5.26	1.41	N/A	08/19/88	0600	NON 2,3,7,8 ISOMERS PRESENT
WH2222	07/26/88	5.01	2.83	N/A	08/19/88	0707	

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/19/88

CASE: HER0726A ISOMER SPECIFIC

Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2221	0.73	0.77		159901	218455	219290	498241	646836
WH2222	0.69	0.81	143827	295972	574322	359168	692290	850603

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

FORM 8-1B TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/88

CASE: HERO7256 ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2258	07/26/88	5.06	1.74	N/A	08/19/88	0814
WH2257	07/26/88	5.11	0.96	N/A	08/19/88	0955

MB	MB =	Method Blank	FB =	Field Blank
N	N =	Native TCDD Spike	IS =	Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR =	Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND =	Not Detected
MPC	MPC =	Maximum Possible Concentration	RS =	Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/19/88

CASE: HER07868 ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/334IS	Response (Area) 259	320	322	328	332IS	334IS
kH2258	0.87	0.76		140331	162222	165837	335979	439299
MH2259	0.77	0.81	171276	180091	235119	361616	853739	1050713

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Minimum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HERC823-03

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/24/88

CASE: HERC811A ISOMER SPECIFIC Column: SP2331; 60M X 0.2E
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2321	08/11/88	4.98	1.88	N/A	08/22/88	1735
WH2322	08/11/88	5.14	3.65	N/A	08/22/88	1809
WH2324	08/11/88	4.96	2.30	N/A	08/22/88	1842
WH2325	08/11/88	4.92	2.66	N/A	08/22/88	1915
WH2326	08/11/88	4.94	10.92	N/A	08/22/88	1948
WH2327	08/11/88	4.89	5.76	N/A	08/22/88	2021
WH2329	08/11/88	5.01	12.32	N/A	08/22/88	2054
WH2329	08/11/88	5.02	3.34	N/A	08/22/88	2127
WH2330	08/11/88	4.94	3.19	N/A	08/22/88	2201
WH2332	08/11/88	5.10	2.78	N/A	08/22/88	2234
WH2333	08/11/88	4.99	4.80	N/A	08/23/88	0013

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/24/88

CASE: HER0811A ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2321	0.82	0.79	61812	206933	250835	214916	485687	617621
WH2322	0.81	0.79	70724	232562	287249	121558	274972	348713
WH2324	0.79	0.79	46012	154001	195082	134630	304993	384781
WH2325	0.79	0.78	56394	184924	233465	140747	315768	403166
WH2326	0.76	0.80	84905	291352	383660	56903	124939	156763
WH2327	0.74	0.80	126633	398652	539990	151747	332584	417332
WH2328	0.88	0.78	71065	258500	292736	43318	88033	112990
WH2329	0.79	0.80	59253	180061	227686	112231	243489	304695
WH2330	0.78	0.81	28213	74856	96314	47665	109542	134700
WH2332	0.82	0.81	67993	178263	217336	124253	280687	348431
WH2333	0.78	0.79	96282	297691	379606	128297	281553	355089

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration
FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

FORM B-1S TCDD SOIL DATA REPORT FORM

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: HER0812A ISOMER SPECIFIC

Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2353	08/12/88	5.13	7.16	N/A	08/23/88	0047
WH2355	08/12/88	4.96	11.65	N/A	08/23/88	0153
WH2357	08/12/88	5.19	5.10	N/A	08/23/88	0226

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/24/88

CASE: HER0512A ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2353	0.80	0.77	107285	370169	464381	100291	223270	288199
WH2355	0.77	0.79	166065	580332	749858	104862	228157	290349
WH2357	0.78	0.78	64084	227259	290012	85012	192740	246969

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 08/24/88

CASE: HERC8126 ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
WH2371	08/12/88	5.05	54.73	N/A	08/23/88	0259

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 08/24/88

CASE: MER0812B ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/334IS	Response (Area) 259	320	322	328	332IS	334IS
WH2371	0.82	0.81	879594	3217719	3941540	151116	261507	321688

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

FORM 5-1B TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 09/24/88

CASE: NEP0815A ISOMER SPECIFIC Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5971MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCCD MPC	GC/MS Date	Analysis Time
WH2375	08/15/88	5.11	1.23	N/A	08/23/88	0332
WH2376	08/15/88	5.09	1.28	N/A	08/23/88	0405
WH2377	08/15/88	5.07	1.34	N/A	08/23/88	0438

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Portrifier Field Blank	RA = Aerum
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	SS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 08/24/88

CASE: HERCULES ISOMER SPECIFIC

Column: SPB331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	322/334IS	259	320	322	328	332IS	334IS
	Response (Area)							
WH2375	0.84	0.79		34436	41035	51735	117641	151417
WH2376	0.78	0.78		74513	95954	112724	256911	329216
WH2377	0.79	0.80	25627	77895	99942	114913	253066	329499

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EXEL-U Performance Evaluation Sample
*PD = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RA = Rerun
ND = Not Detected
RS = Recovery Standard

FORM 8-1S TCDD SOIL DATA REPORT FOR4 Page 1 of 8

Lab: TMS ANALYTICAL SERVICES Report Date: 9/04/88

CASE: MF8237A Column: SP2331: 60M X 0.2E
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5971MSE

CLIENT Sample Number	Extr. Date	Seal Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
METHOD BLANK	08/22/88	5.01	0.00	0.14	08/23/88	17:24
SOIL BLANK	08/22/88	5.00	0.00	0.19	08/23/88	17:57
SOIL SPIKE	08/22/88	5.00	0.75	N/A	08/23/88	18:30
SOIL RE-E	08/22/88	5.00	3.42	N/A	08/23/88	19:03
WH1974	08/22/88	5.04	1.11	N/A	08/23/88	19:35
WH2041	08/22/88	5.00	1.09	N/A	08/22/88	20:08
WH2043	08/22/88	5.11	0.87	N/A	08/22/88	20:41
WH2126	08/22/88	5.16	5.97	N/A	08/23/88	21:14
WH2127	08/22/88	5.00	2.08	N/A	08/23/88	21:47
WH2128	08/22/88	5.14	4.61	N/A	08/23/88	22:20
WH2226	08/22/88	4.98	1.07	N/A	08/23/88	22:52
WH2305	08/22/88	5.00	1.88	N/A	08/23/88	23:59
WH2306	08/22/88	5.05	8.44	N/A	08/24/88	00:32
WH2314	08/22/88	5.11	3.39	N/A	08/24/88	01:05
WH2317	08/22/88	4.98	3.25	N/A	08/24/88	01:38
WH2318	08/22/88	5.11	3.98	N/A	08/24/88	02:11

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate Fortified Field Blank	RB = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 10/24/88

CASE: HEFE37A

Column: SP2331 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/334-IS	Response (Area) 257	320	322	328	332IS	334IS
METHOD BLANK	ERR	0.79	-	-	-	68994	161785	204811
SOIL BLANK	ERR	0.77	-	-	-	57752	142555	185100
SOIL SPIKE	0.75	0.79	+	28300	37951	84755	175875	222653
SOIL PE-B	0.77	0.78	33552	107903	139474	62024	142941	182879
WH1474	0.81	0.81	+	28369	35150	47345	115975	141435
WH2061	0.79	0.80	+	35374	44660	61359	146653	183780
WH2063	0.73	0.76	-	9222	12573	20393	47739	63214
WH2126	0.82	0.77	27794	119100	145106	40619	84072	109991
WH2127	0.79	0.79	26676	69358	88051	70108	150308	190735
WH2123	0.85	0.80	56304	177426	209447	73396	163428	204489
WH2226	0.67	0.76	+	60034	89991	118783	275538	361090
WH2305	0.87	0.77	+	65211	74662	71309	150451	194951
WH2306	0.87	0.90	34692	106304	121825	81694	184365	231741
WH2314	0.97	0.81	39043	95483	109461	60612	131225	161464
WH2317	0.89	0.82	38837	111873	126354	66457	150993	183973
WH2315	0.91	0.81	55297	137139	170210	71440	157293	194571

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HERC250A, 51A, 53A-C

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 09/08/88

HERC250A ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
2018	09/06/88	10.14	0.16	N/A	09/06/88	1918
2019	09/06/88	10.05	1.79	N/A	09/06/88	1950
2021	09/06/88	10.13	1.98	N/A	09/06/88	2023
2022	09/06/88	10.14	1.68	N/A	09/06/88	2056

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/08/88

HERC250A ISOMER SPECIFIC

Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 597CMSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/3341S	Response (Area) 259	320	322	328	3321S	3341S
2016	0.79	0.77	NQ	27858	35129	261542	827625	1070479
2019	0.73	0.79	46323	148946	203097	177995	425423	541045
2021	0.90	0.78	47572	159765	178174	156892	365055	467855
2022	0.74	0.79	46409	161979	218375	213191	487405	617405

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard
NQ = Not Quantitated

Lab: TMS ANALYTICAL SERVICES Report Date: 09/08/88

HERCESIA ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970M3D

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
MB	09/06/88	10.00	0.00	0.17	09/07/88	1925
SB	09/06/88	10.00	0.00	0.22	09/07/88	1958
PE-A	09/06/88	5.00	0.96	N/A	09/07/88	2031
2027	09/06/88	10.00	2.79	N/A	09/07/88	2104
2060	09/06/88	10.00	1.42	N/A	09/07/88	2136
SS	09/06/88	10.00	0.84	N/A	09/07/88	2209
2096	09/06/88	10.05	1.15	N/A	09/07/88	2242
2107	09/06/88	10.10	0.78	N/A	09/07/88	2315
2260	09/06/88	10.20	1.15	N/A	09/08/88	0232
2261	09/06/88	10.09	1.32	N/A	09/08/88	0305
2262	09/06/88	10.11	1.45	N/A	09/08/88	0338
2286	09/06/88	10.18	0.33	N/A	09/08/88	0410
2307	09/06/88	10.04	1.69	N/A	09/08/88	0443

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES Report Date: 09/08/88

HERC251A ISOMER SPECIFIC Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/334IS	Response (Area) 259	320	322	328	332IS	334IS
MB	ERR	0.74				247194	558067	749978
SB	ERR	0.78				194449	446494	569987
PE-A	0.80	0.78	ND	56045	70280	124835	284404	365543
2027	0.78	0.79	69816	235118	303316	180506	420671	533289
2060	0.69	0.78	55107	198779	287825	324320	740418	943189
SS	0.84	0.79	41473	109488	130870	306651	623217	788052
2096	0.80	0.79	51493	126013	157681	241605	531049	673119
2107	0.76	0.80	45176	129587	171487	357893	832741	1046660
2260	0.81	0.80	58455	190975	234972	333870	801326	1001701
2261	0.84	0.77	104805	181165	215992	326145	642439	830022
2262	0.76	0.82	61297	157123	205940	249052	553370	673921
2286	0.85	0.77	ND	36727	43269	237560	514532	665994
2307	0.76	0.80	40821	168646	221003	223002	506154	633639

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration
FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

FORM 3-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 09/09/88

HERCULES ISOMER SPECIFIC Column: SP2331: 60M X 0.2E
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
2120	09/06/88	10.11	11.84	N/A	09/13/88	1259
2121	09/06/88	10.10	7.68	N/A	09/13/88	1301
2206	09/06/88	10.20	0.29	N/A	09/13/88	1338
2208	09/06/88	10.07	0.97	N/A	09/13/88	1416
2257	09/06/88	10.00	1.05	N/A	09/13/88	1457

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/08/88

HERCESTA ISOMER SPECIFIC

Column: SP2331; 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/334IS	Response (Area) 257	320	322	328	332IS	334IS
2120	0.77	0.78	430419	1591525	2056892	258341	662761	849631
2121	0.75	0.83	146309	546524	715365	181404	365950	433615
2206	0.84	0.80	27874	25143	31102	182415	421490	535301
2209	0.75	0.72	49255	79739	105315	185599	392697	540957
2257	0.67	0.79	97032	208667	311779	449825	1052101	1325139

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard

HERC0819A/c9194-03

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 09/20/88

HERC0819A ISOMER SPECIFIC Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
2316	07/28/88	5.08	2.69		08/19/88	1857

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/20/88

HERC0819A ISOMER SPECIFIC

Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	Relative Response Ratios 332/33415	Response (Area) 259	320	322	328	33215	33415
2316	0.89	0.87	NQ	42696	47708	26546	69807	80676

MB = Method Blank
M = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard
NQ = Not Quantitated

FORM B-1S TCDD SOIL DATA REPORT FORM Page 1 of 2

Lab: TMS ANALYTICAL SERVICES Report Date: 09/20/88

HERC0919A ISOMER SPECIFIC Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Extr. Date	Wet Wt.	ug/kg Meas.	TCDD MPC	GC/MS Date	Analysis Time
2354	09/16/88	9.78	6.52		09/19/88	1549

MB	MB =	Method Blank	FB = Field Blank
N	N =	Native TCDD Spike	IS = Internal Standard
D	D =	Duplicate/Fortified Field Blank	RR = Rerun
PE	PE =	EMSL-LV Performance Evaluation Sample	ND = Not Detected
MPC	MPC =	Maximum Possible Concentration	RS = Recovery Standard

Lab: TMS ANALYTICAL SERVICES

Report Date: 09/20/88

HERC0919A ISOMER SPECIFIC

Column: SP2331: 60M X 0.25
ISOMER SPECIFIC FOR 2,3,7,8-TCDD

Instrument ID: HP 5970MSD

CLIENT Sample Number	Relative Response Ratios 320/322	332/3341S	Response (Area) 259	320	322	328	3321S	3341S
2354	0.76	0.79	77620	270860	357104	NB	214633	272213

MB = Method Blank
N = Native TCDD Spike
D = Duplicate/Fortified Field Blank
PE = EMSL-LV Performance Evaluation Sample
MPC = Maximum Possible Concentration

FB = Field Blank
IS = Internal Standard
RR = Rerun
ND = Not Detected
RS = Recovery Standard
NQ = Not Quantitated